AN ACCOUNT OF ARCHITECTS AND ARCHITECTURE,

TOGETHER,

With an Hiſtorical, Etymological Explanation of certain TERMS, particularly Affected by

ARCHITECTS.

Much Inlarg'd and Improv'd, ſince the former Impreſſion.

By *JOHN EVELYN*, Eſq;
Fellow of the ROYAL SOCIETY.

TOGETHER,

With *LEON BAPTIST ALBERTI*,

OF STATUES.

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TO
My moſt Honoured Friend,
Sir *CHRISTOPHER WREN*, Kt.
Surveyor of His Majeſties Buildings and Works.

18.10.12.

SIR,

THat I take the Boldneſs to Adorn this *Little Work*, with the Name of the *Maſter* of the *Works*, (whoſe Patronage alone can give it Reputation) I have no Excuſe for; but an Ambition of Publicly Declaring the great Eſteem I have ever had of Your Vertues and Accompliſhments, not only in the *Art* of *Building*, but thro' all the learned *Cycle* of the moſt *Uſefull* Knowledge and *Abſtruſer Sciences*, as well as of the moſt Polite and Shining: All which is ſo juſtly to be allow'd You, that You need no *Panegyric*, or other *Hiſtory* to Eternize them, than the *greateſt City* of the *Univerſe*, which You have *Rebuilt* and *Beautified*, and are ſtill improving: Witneſs the *Churches*, the Royal *Courts*, Stately *Halls*, *Magazines*, *Palaces*, and other Publick Structures; beſides what You have Built of Great and Magnificent in both the *Univerſities*, at *Chelſey*, and in the Country; and are now advancing of the *Royal Marine Hoſpital* at *Greenwich*, &c. All of them ſo many Trophies of Your Skill and Induſtry, and Conducted with that Succeſs; that if the whole *Art* of *Building* were loſt, it might be *Recover'd* and *found* again in St. *Paul's*, the *Hiſtorical Pillar*, and thoſe other Monuments of Your Happy Talent and extraordinary *Genius*,

I have named St. *Paul's*, and truly, not without Admiration, as oft as I Recall to Mind (as frequently ly I do) the ſad and deplorable Condition it was in, when (after it had been made a *Stable* of *Horſes*, and a *Den* of *Thieves*) You, (with other Gentlemen, and my ſelf) were by the late *King Charles*, nam'd *Commiſſioners* to Survey the *Dilapidations*, and to make Report to His *Majeſty*, in Order to a ſpeedy *Reparation*: You will not, I am ſure, forget the *Strugle* we had with ſome, who were for patching it up any how, (ſo the *Steeple* might ſtand) inſtead of New-Building, which it altogether needed: When (to put an end to the Conteſt) five Days after, that *Dreadful Conflagration happen'd*, out of whoſe *Aſhes* this *Phœnix* is Riſen, and was by *Providence* Deſign'd for You: The *Circumſtance* is too *Remarkable*, that I could not paſs it over without Notice. I will now add no more, but beg Your Pardon for this Confidence of mine; after I have acquainted You, That the *Parallel* (to which this was Annex'd) being out of Print, I was Importun'd by the *Book-Seller*, to add ſomething to a *New Impreſſion*; but to which I was no way Inclin'd, till not long ſince, going to St. *Paul's*, to Contemplate that *Auguſt Pile*, and the Progreſs You have made, ſome of Your *Chief Work-men*, gratefully Acknowledging the Aſſiſtance it had afforded them; I took this Opportunity of doing my ſelf this Honour, who am,

27 *Aug.*
2 *Sept.*
1666.

SIR,

Wotton. 21.
Feb. 169$\frac{6}{7}$.

Your moſt Humble Servant,

J. EVELYN.

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TO THE

READER.

THE Author *of the* Parallel *of the Ancient Architecture* with the *Modern,* (which many Years ſince I made *Engliſh*) *had at the end of his* Treatiſe *begun to explain a few of the hard Words,* Technical Terms *belonging to the* Art; *the* Etymologies *whereof he thought neceſſary to interpret: And as I ſaid, they are but a few indeed, compared to thoſe which remain, about a* Dozen *at the moſt; nor was it neceſſary he ſhould exceed that number, in a* Country *where* Workmen *are generally more intelligent in the proper Expreſſions of the* Terms *of the* Arts *unto which they addict themſelves, than ours for the moſt part are; and therefore, if waving the formal Tranſlation of that* Page *(for it exceeds very little more) I have in lieu thereof conſiderably enlarg'd upon this Occaſion, by a more finiſh'd and compleat enumeration of the ſeveral* Parts *and* Members *of the* Orders, *as they gradually ſucceed one another in* Work, *illuſtrated with more full and exact* Definitions *(than by any has yet been attempted for the Benefit of our* Countrymen.) *I hope my Adventure may find both Pardon and Acceptance. Nor let any Man imagine we do at all obſcure this Deſign by adorning it with now and then a refin'd, and* Philological *reſearch; ſince whilſt I ſeek to gratify the Politer* Students *of this Magnificent* Art, *I am not in the leaſt diſdainful of the loweſt Condeſcentions, to the Capacities of the moſt Vulgar Underſtandings; as far at leaſt as the Defects, and Narrowneſs of our* Language *will extend, which rather grows, and abounds in Complemental and Impertinent* Phraſes, *and ſuch froth (as Sir* H. Wotton *well obſerves from* Gualterus Rivius's *incomparable Verſion of* Vitruvius *in the* German Tongue, *and is now ſo far out-done by the Learned* Perault) *than in the ſolid Improvements of it; by either* preſerving or introducing what were truly needful: And really, thoſe who are a little Converſant in the Saxon Writers, clearly diſcovered by what they find Innovated, or now grown Obſolete, that we have loſt more than we have gain'd; and as to Terms of uſeful Arts in particular, forgotten and loſt a World of moſt apt and proper Expreſſions which our Forefathers made uſe of, without being Oblig'd to other Nations: And what care the French have taken upon this Account only, may in part be judged from that pretty, though brief Eſſay des Merveilles de Nature, & des plus Nobles Artifices, &c. but eſpecially by the late Dictionaries, wherein the proper Terms of the moſt Vulgar, as well as more Poliſh'd Arts are Induſtriouſly delivered, whilſt (to ſpeak Ingenuouſly) I find very little Improvement in the moſt Pretending Lexicons and Nomenclators yet Extant; that of Bernardinus Baldus only upon Vitruvius excepted; which yet is neither after my Method, nor for our Workmens turn, being a Book of Price, and written in the moſt Learned Tongue. It is a very great Deficient indeed, and to be deplor'd; that thoſe induſtrious Compilers did make it no more their Buſineſs to gratifie the World with the Interpretation of the Terms of ſo many uſeful Arts, I mean the Mechanical: Adrianus Junius has deſerved well on this Occaſion, to his great Commendation; and much it were to be Wiſhed, that ſome Univerſal and Practical Genius would conſummate what he has ſo happily begun, and that not only in the Arts Illiberal (as they are diſtinguiſhed) and things Artificial; but furniſh us likewiſe with more exact Notices of the ſeveral and diſtinct Species of Natural Things; ſuch as are the True Names of Birds, Fiſhes, Inſects, Stones, Colours, &c. in which divers Worthy * Members of the Royal Society, have already made ſo conſiderable a Progreſs; ſince it is then, and not till then, our Lexicons will have arrived to their deſired Perfection, and that Men will be taught to ſpeak (like Orators indeed) Properly on all Subjects, and obliged to Celebrate their Labours.

*Mr. Willougbie. D.D. Merel, Charleton, Waller, Ray, &c. And Mr. Harris in his late moſt uſefull Lexicon Technicum.

J. Evelyn.

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ACCOUNT OF *ARCHITECTS* and *ARCHITECTURE*,

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18.10.12.

THE Knowledge of this Sumptuous, Magnificent and Uſeful *Art* for having been firſt deriv'd to us from the *Greeks*, we ſhould not without infinite Ingratitude either ſlight, or innovate thoſe *Terms* which it has pleaſed them to Impoſe upon the particular *Members* and *Ornaments* belonging to the ſeveral *Orders*; and that as well for the Veneration which is due to *Antiquity*, as that by Comprehending the Signification of them, we may with the more Facility and Addreſs, attain to the Intelligence and Genuine Meaning of what the *Maſters* in this *Profeſſion* have deliver'd to us in their ſeveral Writings and Works; not to inſiſt upon (what is yet not to be deſpis'd) the Decorum of ſpeaking *Properly*, in an *Art* which the greateſt *Princes* and *Potentates* of the *Earth*, have Vouchſafed to Honour by ſo many Signal and Illuſtrious Monuments, as do to this Day conſecrate their Memories to Poſterity.

Since the *Agent* does always precede the *Action*, and the *Perſon* or *Workman* is by Natural Order before his *Work*; we are by an *Architect* *Architectus.* to underſtand, *A Perſon Skilful in the Art of Building*: The Word is Ἀρχιτέκτων, a Compound in the Original, and ſignifies *Fabrûm præfectus*, or if you will, *Informator*, which the *Preſident*, *Superintendent*, or *Surveyor* of the *Works* does fully expreſs; his Ἀρχὴ being relative to the *Fabri* that are under him, as the *Operæ* or *Labourers* are Subſervient to them.

Budæus calls him, *Structorum Princeps*; and ſuch a Perſon as is capable of rendring a Rational, and Satisfactory Accompt of what he takes in Hand. *Ratiocinatio autem eſt, quæ res fabricatas ſolertia, ac ratione proportionis demonſtrare atque explicare poteſt. Vitr.* l. 1. c. 1. So our *Maſter*; and ſuch a one it ſeems was that *Philo* the *Athenian* Architect, of whom the Orator, *Neque enim ſi Philonem illum Architectum, qui Athenienſibus Armamentarium fecit, conſtat perdiſerte populo rationem operis ſui reddidiſſe, exiſtimandum eſt Architecti potius* ar-

artificio diſertum, quam Oratoris fuiſſe, de Orat. 1. Seeing his Knowledge and Ability in this Faculty did not at all Eclipſe and Diminiſh his Eloquence and other excellent Parts, but rather added to them; and this I urge to ſhew that it was no mean thing for a Man to arrive to the Talents of an accompliſh'd *Architect*; as he that ſhall take his *Character* out of *Vitruvius* will eaſily conclude; *Itaque Architecti* (ſays he) *qui ſine literis contenderunt, ut manibus eſſent exercitati, non potuerant efficere ut haberent pro laboribus Authoritatem*; as if *Hands* could do little in this *Art* for their Credit without *Letters*: Nay, ſo Univerſal will this great *Dictator* have him; that in thoſe *Duodecim neceſſaria,* he ſums up no leſs than *Twelve* rare *Qualities* which he would have him furniſh'd withal; *Itaque eum & Ingenioſum,* &c. I will but only touch them: 1. He muſt be *Docil* and *Ingenious.* 2. He muſt be *Literate.* 3. Skilful in *Deſigning* and *Drawing.* 4. In *Geometry.* 5. *Opticks.* 6. *Arithmetick.* 7. *Hiſtory* 8. *Philoſophy.* 9. *Muſick.* 10. *Medicine.* 11. Nay, in *Law*; and 12. *Aſtrology*; and really, when (as in the following Chapter) he there aſſembles his Reaſons for all this, you will be both ſatisfied with them, and Juſtify his Curioſity. Not that an *Architect* is obliged to be an Accurate *Ariſtarchus* in *Grammar*, or an *Ariſtoxenus* in *Muſick*, an *Appelles* or a *Raphael* for *Deſigning*; in ſum an exact *Profeſſor* in all theſe Faculties, *ſed in his non Imperitus*: Sufficient it is he be not totally a Stranger to them; ſince without *Letters* he cannot conſult with *Authors*: Without *Geometry* and the *Graphical* Arts, he will never be able to meaſure out, and caſt the *Area*; draw the *Plot* and make the *Scale*: Being Ignorant of the *Opticks* he can never well underſtand the due placing of his *Lights*, Diſtance, Magnitude and Dimenſions of *Ornaments*: By the aſſiſtance of *Arithmetick* he Calculates the Proportions of the ſeveral *Orders*, ſums up his *Accompts*, and makes an Eſtimate of the Charge: Being Read in *Hiſtory* he comes to Diſcourſe of the Reaſons, and Original of many particular *Members* and Decorations, the Height, Improvement, and Decay of this *Art*; why the *Greeks* inſtituted the Order of the *Caryatides*, and the *Perſian Entablatures* were ſupported by *Slaves*; how the *Corinthian* Capitels came to be adorn'd with *Foliage*, the *Ionique* with a Matron-like *Voluta*, &c. By the ſtudy of *Philoſophy* he arrives to the Knowledge of Natural Things, and is able to diſcern the quality of the *Elements*, and the Materials which he makes uſe of: From ſome Inſight in *Medicine* he can Reaſon of the Temperature and Salubrity of the *Air*, and Situation: *Muſick* will aſſiſt him in contriving how in *Churches*, *Tribunals* and Publick *Theatres*, Men may with beſt Advantage hear the *Preachers*, *Magiſtrates* and *Actors* Voices: Without ſome Tincture in the *Laws*, he cannot be ſecure of his *Title*; and being wholly Ignorant of *Aſtrology*, Poſition and Influences of the *Cœleſtial Bodies*, the *Days*, *Winds*, *Weather*, *Equi-*

noxes, and Courſe of the Heavenly *Orbs* (as to Bruits) paſs over without Obſervation, Benefit, or Prevention of their Effects. To this Purpoſe (though much more at large) *Vitruvius*: But by this you may ſee how neceſſary it is, that an accompliſh'd *Maſter-Builder* ſhould be furniſh'd beyond the Vulgar, and I have been the longer in the Repetition, not only that I may advance his Reputation, and for Encouragement; but to ſhew that in the proper Notion (and as the great *Plato* has ſomewhere deſign'd him) *Nullus Architectus utitur manuum Operâ, ſed utentibus præeſt.* Dial: de Regno. *See alſo his* Philebus. An Architect is not to be taken for the commonly illiterate *Mechanick* (which may bring it into Contempt) but for the Perſon who *Superintends*, and *Preſides* over him with ſo many Advantages: Yet neither is this to the Diſhonour of the meaneſt of thoſe Excellent *Workmen*, who make uſe of their *Hands* and *Tools* in the groſſer Materials, ſince *God* himſelf, and *Nature*, the Univerſal Builders, are by *Tranſlation* truly ſtyl'd *Architects*, both as to what they have excogitated ſo wiſely, and wrought ſo Artificially.

Be this then ſpoken of the *Superintendent* in particular, whom for Diſtinction ſake and the Character aſſign'd him we may name *Architectus Ingenio*: For ſince to the Perfection of an accompliſh'd Building there were three *Tranſcendencies* required: 1. *Strength*, 2. *Utility*, and 3. *Beauty*, for the apt *Diſtribution*, *Decor* and fitneſs, *Symmetrie* and Proportion; there was likewiſe neceſſary as many Capacities; and that beſides the judicious *Head* there ſhould be a Skilful *Hand*, to which let us add, *Architectus Sumptuarius*, a full and overflowing *Purſe*: Since he who bears *this* may juſtly be alſo ſtiled a *Builder*, and that a *Maſter one* too; as being the Perſon at whoſe Charge, and for whoſe Benefit the *Fabrick* is erected; and it is indeed the *primum mobile* which both begins, and conſummates all deſigns of this Nature; for if that ingredient come once to fall ſhort, Men build their *Monuments*, inſtead of their *Houſes*, and leave Marks of Diſhonour for *Tables* of Renown, *Homo iſte cæpit ædificare & nequivit perficere*, This Man began to Build, and was not able to finiſh. *See* 21. Eccleſ. 8. Yet thus have I known ſome Excellent Perſons abus'd; who truſting to the Computation of either Diſhoneſt, or Unskilful *Artiſts*, have been forc'd to deſiſt, ſit down by the Loſs, and ſubmit to the Reproach: But ſo it ſeems would not the *Greeks* ſuffer themſelves to be Over-reach'd; Vitr. *in* Præf. *lib.* 10. when thoſe great Builders of *Epheſians* (who knew ſufficiently what a Miſchief it was to the Publick, as well as Private Men) ordain'd it for a Law; That if a *Clerk* undertook a *Work*, and ſpent more than by his Calculation it amounted to, he ſhould be obliged to make it Good out of his own Eſtate; whilſt they moſt Liberally and Honourably rewarded him, if either he came within what was firſt deſign'd, or did not much exceed it. And this was eſteem'd ſo reaſonable (upon conſideration how many Noble

2. Reg. 22. 7. Perſons had been undone, and Magnificent *Structures* left Imperfect) that *Vitruvius* writing to the great *Auguſtus* concerning this Subject, wiſhes the ſame Conſtitution were in force at *Rome* alſo: But thus I have done with our *Architectus Sumptuarius.* I come to the

Manuarius the third and laſt, but not the leaſt of our *Subſidiaries*; for in him I comprehend the ſeveral *Artizans* and Workmen, as *Maſons, Stone-cutters, Quarry-men, Sculptors, Plaſterers, Painters, Carpenters, Joyners, Smiths, Glaziers,* and as many as are neceſſary for carrying on of a *Building* till it be arriv'd to the Perfection of its firſt *Idea.* But tho' it is not (as I ſaid) expected that theſe ſhould trouble themſelves with much Learning, or have any thing to do with the Accompliſhments of our *Maſter Superintendent*: Yet, ſince an Exact and Irreprochable Piece of *Architecture* ſhould be κολοφὼν *totius Matheſeως*, the Flower, and Crown as it were of all the *Sciences Mathematical*, it were infinitely deſirable that even every Vulgar *Workman* whoſe Calling is Converſant about *Building*, had attained to ſome Degree of competent Knowledge in the more eaſy and uſeful Principles of thoſe *Lineary Arts*, before they were admitted to their *Freedom*, or employed in Deſigns of Moment. And truely, if a thorough Inſight of all theſe (as undoubtedly they are) be neceſſary to a good *Artiſt*; I know no Reaſon but ſuch a Perſon (however it hath pleaſed our *Vniverſities* to Employ and Decree their *Chaires*) might with very juſt Reaſon be alſo numbred *inter liberalium diſciplinarum Profeſſores*, and not thruſt out as purely *Mechanical, inter opificis*, a Converſation hitherto only admitted them; as if *Talking, Speculation* and *Theories*, were Comparable to uſeful *Demonſtrations* and *Experimental Knowledge*; in a Word, the very *Name* Imports an Excellency above other Sciences; ſo as when the * *Orator* would Expreſs a Superiority above them, for its vaſt Extent and Comprehenſion; he mentions *Architecture* with the *Firſt*, diſtinct from the *Illiberal*: Great Pitty then I ſay it is, that amongſt the *Profeſſors* of *Humanity* (as they call it) there ſhould not be ſome *Lectures* and *Schools* endowed and furniſh'd with *Books, Inſtruments, Plots, Types* and *Modells* of the moſt excellent Fabricks both in *Civil* and *Military Architecture*, where theſe moſt Noble and Neceſſary *Arts* might be Taught in the *Engliſh* and Vulgar Tongue, retriev'd to their Proper, and Genuine Significations; and it is to be hoped, that when his *Majeſty* ſhall perfect his Royal *Palace* of *White-Hall* according to the Deſign, he will in Emulation of thoſe Heroes, *Francis the Firſt, Henry the Fourth, Coſimo de Medices*, the *Dukes* of *Vrbin, Richlieu*, and other Munificent Spirits, Deſtine ſome *Apartments* for the Eaſe and Encouragement of the ableſt Workmen in *this*, as in all other *uſeful, Princely* and *Sumptuous* Arts: I mean for *Printers, Painters, Sculptors, Architects*, &c. by ſuch Liberal *Honoraries* as may draw them from all Parts of the World to Celebrate his *Majeſty* by their Works to Poſte-

* *Office* L. 2.

Poſterity, and to Improve the Nation: From ſuch a Bounty and Proviſion as *this* it appears to have been, which made *Vitruvius* to leave us thoſe his incomparable Books, that we have now enjoy'd for ſo many Ages; For ſo he acknowledges it to the Great *Auguſtus*, *Cum ergo eo beneficio eſſem Obligatus, ut ad exitum Vitæ non haberem inopiæ timorem*, &c.

Vitruv. *in præfac. ad Lib.* 1.

I might upon this Occaſion ſpeak ſomething here concerning the *Matter* and *Form* of Buildings, which after the *Perſons* who undertake them, are their moſt Solid and Internal *Principles*; but I purpoſely paſs them over at preſent, becauſe they do not properly belong to this Diſcourſe, but to ſome more intire Treatiſe of the whole *Art* than is yet extant amongſt us, and to be delivered by ſome Induſtrious Perſon who ſhall oblige the *Nation* with a thorough Examination of what has already been written by *Vitruvius* l. 2. c. 3. ad 9. *Palladio* 1. c. 2. *Leon Alberti* l. 2. c. 45. 46. *Don Barbaro* l. 11. Sir *H. Wotton* in his Conciſe and uſeful *Theorems*, *Deſgodes*, *D'Avilar*, *Perault*, *Blondel*, and others; and in what ſhall be found moſt Beneficial for our *Climat*; it were I ſay, becoming our great Needs that ſome Ingenious Perſon did take this in Hand, and Advance upon the *Principles* already eſtabliſh'd, and not ſo Acquieſce in them as if there were a *Non Vltra* Engraven upon our *Columns* like thoſe of *Hercules*, after which there remained no more to be diſcovered; at leaſt in the Apprehenſion of our Vulgar Workmen, who for want of ſome more ſolid Directions, Faithful and eaſy Rules in this Nature, fill as well whole *Cities* as *Private Dwellings* with Rubbiſh and a thouſand Infirmities, as by their want of Skill in the Profeſſion, with the moſt ſhameful Incongruities and Inconveniences in all they take in Hand; and all this for want of *Canons* to proceed by, and *Humility* to learn; there being hardly a Nation under Heaven more conceited of their Underſtandings and Abilities, and more impatient of Direction than our Ordinary *Mechanicks*: For let one find never ſo juſt a Fault with a *Workman*, be the ſame of what *Miſtery* ſoever, immediately he ſhall reply, *Sir*, I do not come hither to be Taught my *Trade*, I have ſerv'd an *Apprenticeſhip*, and have wrought e're now with *Gentlemen* that have been ſatisfied with my Work, and ſometimes not without Language of Reproach, or caſting down his Tools, and going away in Wrath; for ſuch I have frequently met withal. I do not ſpeak this to diminiſh in the leaſt from the Capacity and Apprehenſion of our *Nation* who addict themſelves to any of the moſt Polite and Ingenious *Profeſſions*, but to Court them to more Civility, and to Humble the Ignorant: For we daily find that when once they arrive to a thorough Inſpection and Addreſs in their *Trades*, they Paragon, if not Exceed even the moſt Exquiſite of other Countries, as we may ſee in that late Reformation and Improvement of our *Lock-Smiths* work, *Joyners*, *Cabinet-makers* and the like, who from very

Vulgar and Pitiful *Artiſts*, are now come to Produce *Works* as Curious for the *Filing*, and admirable for their Dexterity in *contriving*, as any we meet with abroad, and in particular to our *Smiths* and *Joyners*, they Excell all other Nations whatſoever.

But as little Supportable are another Sort of *Workmen*, who from a good Conceit of their Abilities, and ſome Lucky *Jobb* (as they call it) do generally Ingroſs all the Work they can hear of, while in the mean time they Diſdain almoſt to put their own Hands to the *Tool*, but for the moſt part employ their *Apprentices*, or ſome other Ignorant *Journey-men*; as if the Fame of their *Maſters* Abilities did any thing contribute to the well Performance of Work undertaken, whilſt in the Interim *He* hardly appears himſelf till all the Faults be ſlubber'd over, the Remedy either impoſſible or expenſive, and our *Maſter* ready to receive his Money, which ſuch *Gentlemen Mechanicks* commonly conſume on Eaſe and Bravery, being puffed up with an empty Conceit of their own Abilities, which (*God* knows) is very Indifferent, and the leſs for want of Exerciſe and Humility: A Practice contrary to the Uſage of all other *Nations*, that even ſuch as by their Knowledge in this Kind, have Meritoriouſly attained to the Titles of *Military* Dignity, have notwithſtanding purſued their Employments and Callings in Perſonal Cares and Aſſiduous Labours, to their eternal Fame ſo long as one Stone ſhall lie upon another in this World, as I could abundantly exemplifie in the Works of *Cavalieri Fontane*, *Bramanti*, *Sanſovino*, *Baglione*, *Bernini*, *Fiamingo*, &c. whoſe egregious Labours, both before, and ſince the Accumulation of their Honours, do ſufficiently juſtifiy what I report concerning them. And that all ſuch may know I reproach no Man out of Spleen or the leaſt Animoſity to their Perſons (for ſuch as are not Guilty will never be offended at my Plainneſs, or take this for a *Satyr*) I cannot but exceedingly Redargue the want of more Acquaintance in theſe ſo neceſſary and becoming *Arts* even in moſt of our *Nobility* and *Gentry*, who either imagine the Study of *Architecture* an abſolute *Non-neceſſary*, or Forſooth a Diminution to the reſt of their *Education*, from whence proceeds that miſerable loſs of ſo many irrecoverable Advantages during their *Travels* in other *Countries*, as appears at their return; whereas if they were truly conſidered, there is nothing which does more properly concern them, as it Contributes to their external Honour, than the Effects of this Illuſtrious *Art*: Beſides, theſe being Perſons of better Parts, are moſt likely to be furniſh'd with the beſt Abilities to learn, and ſo conſequently enabl'd to examine, and direct ſuch as they ſhall ſet on Work, without reproach either to their Conveniency or Expence when they at any time Build, not forgetting the Ornament and Luſtre which by this means Rich and Opulent Structures do add to the *Commonwealth*; there remaining at this Day no one particular, for which *Egypt*, *Syria*, *Greece*, nay *Rome* her ſelf (beheld in all their *State*, *Wiſdom* and *Splendor*) have been more admir'd and celebrated, than for the *Glory*, *Strength* and *Magnificence* of their Incomparable *Buildings*; and even at preſent, the moſt noble *Youth* of *Italy* are generally ſo well furniſh'd with Inſtructions touching this Laudable *Art*, that the Knowledge of *Architecture* (and to ſpeak properly in its *Terms*, *&c.*) is univerſal, and ſo cheriſh'd, even in Men of Obſcure extraction, that (as is already inſtanc'd) *Architects* (I mean the *Manuary* as well as *Ingeniary*) have been, and are yet often rewarded with *Knighthood*, and the *Art* profeſs'd as a moſt becoming and neceſſary Accompliſhment in divers of their *Academies*: Add to this the *Examples* of ſo many great and illuſtrious Perſons as (without mentioning thoſe our *Maſter* has recorded in the *Preface* to his ſeventh Book) I might here bring upon this *Theatre*, famous for their Skill and Encouragement of this Sumptuous Art: *Emperours*, *Kings*, *Popes*, *Cardinals* and *Princes* innumerable, who have all of them left us the permanent Monuments of it in the ſeveral places of their Dominions, beſides the infinite Advantage of well managing of great and *Publick* Expences, as well as the moſt *Private* and *Oeconomical*, an handſom and well contriv'd Houſe being built at a far leſs Charge, than commonly thoſe irregular *Congeſtions*, rude and brutiſh Inventions, which generally ſo deform and incommode the ſeveral Habitations of our *Gentry* both in *City* and *Country*.

But I have done, and I hope all that love and cheriſh theſe *Arts*, and particularly that of *Architecture*, will not be offended at this *Zeal* of mine in beſpeaking their Eſteem of it; ſince if I have ſaid any thing in Reproof of the *Errors* either of the *Perſons* who pretend to it, or of the *Works* which they do to its Diſgrace; I have only ſpoken it that both may be reformed and made the better. But leaſt whilſt I thus diſcourſe of the *Accompliſhments* of our *Artiſts*, and defects of the *Pretenders*, I my ſelf be found *Logodædalus*, and as they ſay, *Architectus Verborum* only, I proceed from the *Perſon* to the *Thing*.

Architecture, conſider'd as an *Art*, was doubleſs (as all others were) very Mean and Imperfect at firſt; when from dark *Caverns*, hollow *Trees*, deſpicable and ſorry Hovells and *Cabanes*, made with their rude Trunks, cover'd with Sods of Turf or Sedge, to protect themſelves from the Injuries of the Weather, and Wild-Beaſts (as at preſent Savage People do) Men liv'd not much better Accommodated, than Beaſts themſelves, wandring from Place to Place; either to Hunt, and in queſt of Food, or to find Paſture; where like the *Nomades*, with little Care or Labour, they make them *Huts* again, to ſhelter themſelves as before; till coming into ſome more Fertile and Fruitful Country, and finding no more neceſſity of ſtraying farther, or removing ſo often; they then 'tis likely begun to Build more Subſtantially and Commodiouſly; and as Plenty, their Families and Civility increas'd; began to Inlarge, and make their Habitations, as well leſs Rudely, as more Convenient; proceeding in tract of time to great Politeneſs, and to that height of Splendor and Magnificence; as at laſt, Ingenious Men, from long Experience ſtill advancing in Improvements, began to frame ſuch *Rules* and Precepts for *Building*, as ſhould anſwer to all thoſe *Perfections* deſirable in a *Building*, namely, *Solidity*, *Uſe*, and *Beauty*, and this *Art* was called,

Architectura.

Architectura, a Term deriv'd from the *Greek* Subſtantive ’Αρχιτεκτόνημα, and which is by *ſome* taken for the *Art* it ſelf, by *others* for the Work, *ædificio ipſo & Opera*, (by *us* for *both*) is thus defin'd; *Scientia pluribus diſciplinis, & variis eruditionibus ornata, cujus judicio probantur, omnia quæ à cæteris artibus perficiuntur, opera.* *Architecture* (ſays our Maſter *Vitruvius*) is a *Science* qualified with ſundry other *Arts*, and adorn'd with variety of *Learning*, to whoſe Judgment and Approbation all other Works of *Art* ſubmit themſelves. Or rather in ſhort, and as effectual *cujus præceptis diriguntur, & judicio probantur*, &c. for ſo it ſeems to be more explicite; ſince in a *Geometrical* Problem there are both the *Conſtruction*, or Direction *Operis faciendi*, which theſe *Præcepta* define; and alſo, the *Demonſtration* or Probation *Operis jam facti*, which is ſpecified by the *Judicium* in the *Vitruvian* Definition. I conceive therefore the *firſt* part to be the more Eſſential and Inſeparable; the *latter* to be but the Reſult of the *former*, and no more Ingredient into the *Art*, than the Image of ones Face in a *Glaſs* is conſtitutive of the Man.

Demonſtratio.

But to forbear any farther *Gloſs*, you ſee what a large Dominion it has, and I might go on: *Ea naſcitur ex fabrica & ratiocinatione*, to ſhew that ſhe is the *Daughter* of *Building*, and *Demonſtration*: Then, (for ſo I affect to render it) that *Building is the reſult of an aſſiduous and manual Practice or Operaion upon apt Materials according to the Model propounded*; and laſtly, That our *Raciocination is an Ability of Explicating what we have done by an Account of the juſt Proportions*; In a Word, it is the *Art of Building well*, which (taken in the large Senſe) Comprehends all the ſorts and kinds of *Buildings* whatſoever, of which there are more eſpecially *Three*; which tho' differing in their Application, Deſign and Purpoſe, are yet of neere Relation to one another, and therefore not improperly, under the ſame Denomination, with their reſpective Adjuncts of Diſtinction: For Inſtance, The Building of *Ships*, and other Veſſels for Sailing, War and Commerce, *&c.* is call'd *Naval Architecture*: The Art of *Fortification* and Defence of Places *Military Architecture*; which, tho' under the ſame Rules and general Principles, whereby to work and preceed (but indeed making uſe of different *Terms* of *Art*) yet paſs they under the ſame general Name of *Architecture*. Now for as much as there's only *One* of theſe, which properly concerns the preſent *Subject* (as being indeed the moſt Eminent, and *Firſt* in Order.)

We are here to underſtand by *Architecture*, the *Art* and *Skill* of *Civil Building* for Dwelling-Houſes, Commodious Habitations, and more publick Edifices.

What pretence this part of *Architecture* has to both the other kinds, namely, the *Naval* and *Military*; the Foundation and Building of *Cities*, *Walls*, *Towers*, *Magazines*, *Bridges*, *Ports*, *Moles* and *Havens*, abundantly ſhew; together with what our Great *Maſter Vitruvius* has taught in the Conſtruction of divers *Machines*, and War-like Engines, as well for Offence as Defence: and to ſhew how Reconcileable all theſe different ſorts of Building are to one another; we have a *Modern*, but an Illuſtrious Inſtance, in that Surprizingly Magnificent Piece of Art, the *Pentagonal Palace* erected for *Cardinal Alexander Furneze* at *Caprarola* (within twenty Miles of *Rome*) by that Excellent and Skillful *Architect Vignola*, one of the Firſt Rank and *Claſs* of Artiſts in the foregoing *Parallel*.

With Reaſon therefore, as well as Right, has the *Surveyor* of his *Majeſties Works* and *Buildings*, both the *Military*, as well as *Civil Architecture*, properly under his Intendency and Inſpection, by a *Grant* (as I have heard) of many Hundred Years paſt. But

To Enlarge on the ſeveral Heads of *Civil Architecture* (of which there are very many) would be to Extend this Diſcourſe to a length not ſo proportionable to that which is deſign'd: Let it then Suffice to take Notice, That it is the Ancient *Greek* and *Roman Architecture* only, which is here Intended, as moſt entirely anſwering all thoſe Perfections requir'd in a Faultleſs and Accompliſh'd Building; ſuch, as for ſo many Ages were *ſo* Renowned and Reputed, by the Univerſal Suffrages of the Civiliz'd World, and would doubtleſs have ſtill ſubſiſted, and made good their Claim, and what is Recorded of them; had not the *Goths*, *Vandals* and other Barbarous Nations, Subverted and Demoliſh'd them, together with that Glorious *Empire*, where thoſe ſtately and pompous Monuments ſtood; Introducing in their ſtead, a certain Fantaſtical and Licencious manner of Building, which we have ſince call'd *Modern* (or *Gothic* rather) Congeſtions of Heavy, Dark, Melancholy and *Monkiſh Piles*, without any juſt Proportion, Uſe or Beauty, compar'd with the truly *Antient*: So as when we meet with the greateſt Induſtry, and expenſive *Carving*, full of *Fret* and lamentable *Imagry*; ſparing neither of Pains nor Coſt; a Judicious Spectator is rather Diſtracted and quite Confounded, than touch'd with that Admiration, which reſults from the true and juſt *Symmetrie*, regular Proportion, Union and Diſpoſition; Great and Noble manner, which thoſe *Auguſt* and Glorious Fabrics of the *Ancients* ſtill Produce.

It was after the Irruption, and Swarmes of thoſe Truculent People from the *North*; the *Moors* and *Arabs* from the *South* and *Eaſt*, over-running the Civiliz'd World; that wherever they fix'd themſelves,

ſelves, they ſoon began to Debauch this Noble and Uſeful Art; when inſtead of thoſe Beautiful *Orders*, ſo Majeſtical and Proper for their Stations, becoming Variety, and other Ornamental Acceſſories; they ſet up thoſe Slender and Miſquine *Pillars*, or rather bundles of *Staves*, and other incongruous Props, to ſupport incumbent Weights, and pondrous Arched Roofs, without *Entablature*; and tho' not without great Induſtry (as *M. D'Aviler* well obſerves) nor altogether Naked of Gaudy *Sculpture*, trite and buſy Carvings; 'tis ſuch as rather Gluts the Eye, than Gratifies and Pleaſes it with any reaſonable Satisfaction: For Proof of this (without Travelling far abroad) I dare Report my ſelf to any Man of Judgment, and that has the leaſt Taſte of Order and Magnificence; If after he has look'd a while upon *King Henry* the VIIth's *Chappel* at *Weſtminſter*; Gaz'd on its ſharp *Angles*, *Jetties*, Narrow Lights, lame *Statues*, *Lace* and other *Cut-work* and *Crinkle Crankle*; and ſhall then turn his Eyes on the *Banqueting-Houſe* built at *White-Hall* by *Inego Jones* after the Antient manner; or on what his *Majeſties* preſent *Surveyor* Sir *Chriſtopher Wren* has lately advanc'd at St. *Paul*'s; and conſider what a Glorious Object the deſign'd *Cupola*, *Portico*, *Colonads* and other (yet Unfiniſh'd) Parts, will then preſent the Beholder: Or compare the *Schools* and *Library* at *Oxford* with the *Theatre* there; or what he has lately Built at *Trinity College* in *Cambridge*, and ſince all theſe at *Greenwich* and other Places (by which time our *Home-Traveller*, will begin to have a juſt *Idea* of the *Antient* and *Modern Architecture*) I ſay, let him well conſider, and compare them judiciouſly, without Partiality and Prejudice; and then Pronounce, which of the two *Manners* ſtrikes the Underſtanding as well as the Eye with the more Majeſty, and ſolemn Greatneſs; tho' in ſo much a Plainer and Simple Dreſs, Conforme to the Reſpective *Orders* and *Entablature*; and accordingly determine, to whom the Preference is due: Not as we ſaid, that there is not ſomething of ſolid, and *Odly* Artificial too, after a ſort: But then the Univerſal and unreaſonable Thickneſs of the Walls, Clumſy Buttreſſes, Towers, ſharp pointed Arches, Doors, and other Apertures, without Proportion; Non-Senſe Inſertions of various Marbles impertinently plac'd; Turrets, and Pinacles thick ſet with *Munkies* and *Chimæras* (and abundance of buiſy Work and other Incongruities) diſſipate, and break the Angels of the Sight, and ſo Confound it, that one cannot conſider it with any Steadineſs, where to begin or end; taking off from that Noble *Aier* and *Grandure*, Bold and Graceful manner, which the *Antients* had ſo well, and judiciouſly Eſtabliſh'd: But, in this ſort have they, and their Followers ever ſince fill'd, not all *Europe* alone, but *Aſia* and *Africa* beſides, with Mountains of Stone, Vaſt, and Gygantic Buildings indeed; but not Worthy the Name of *Architecture*: Witneſs (beſides frequent Erections in theſe Kingdoms, Inferior to none for their utmoſt Performances)

ances) what are yet ſtanding at *Weſtminſter*, *Canterbury*, *Salisbury*, *Peterborow*, *Ely*, *Wells*, *Beverly*, *Lincoln*, *Glouceſter*, *York*, *Durham*, and other *Cathedrals* and *Minſters*: What at *Utrecht*, *Harlem*, *Anwerp*, *Strasburg*, *Baſil*, in the lower and upper *Germany*: At *Amiens*, *Paris*, *Roan*, *Tours*, *Lyons*, &c. in *France*; at *Milan*, *Venice*, *Florence*, nay in *Rome* her ſelf: In *Spain*, at *Burges*, and *Seville*, with what the *Moors* have left in *Athambrant*, *Granada*. The *Santa Sophia* at *Conſtantinople*; That of the *Temple* of the *Sepulchre* at *Jeruſalem* (at the Decadence at leaſt of the Art.) The *Zerifs* Palace at *Morocco*, *&c.* beſides the innumerable *Monaſteries* and Gloomy *Cells*, built in all theſe Places by the *Chriſtians*, *Greeks*, *Latines*, *Armenians*, *Moors*, and others ſince the Ruin of the Empire; and compare them (almoſt numberleſs as they are) with *One* St. *Peter*'s at *Rome* only, which, with the reſt of thoſe venerable *Churches*, Superb and Stately *Palaces* there and at *Naples*, *Florence*, *Genoa*, *Eſcurial*, *Paris*, *Amſterdam*, &c. were yet all but ſorry Buildings, till *Bramante*, *Raphael*, *Mich. Angelo*, *Palladio*, (*Bernini*,) and other *Heroes* and Maſters of our *Parallel*, Recover'd and even Raiſed this *Art* to Life again, and Reſtor'd her to her Priſtine Splendor and Magnificence, after ſo tedious and diſmal a Night of Ignorance and Superſtition, in which *Architecture* had lain Buried in Rubbiſh, and ſadly deform'd for ſo many Ages: The ſame may likewiſe be affirm'd of all thoſe other *Arts* attendant upon her, *Sculpture* and *Painting* eſpecially, and indeed of *Letters*, and all good Learning too, which had about this time, their *Reſuſcitation* alſo; In a Word, and after all that has been ſaid of *Architecture* Ancient, or Modern; 'tis not we ſee enough to Build for *Strength* alone (for ſo thoſe *Gothic* Piles we find ſtand their Ground, and the *Pyramids* of *Ægypt* have out-laſted all that Art and Labour have to ſhew) or indeed for bare *Accommodation* only, without due *Proportion*, *Order* and *Beauty*, and thoſe other *Agreements*, and Genuine *Characters* of a Perfect, and Conſummate Building; and therefore an *Art* not ſo eaſily attain'd by every Pretender, nor in Truth at all; without a more than ordinary *Diſpoſition*, accompanied with Judgment, Induſtry and Application; due Inſtruction, and the Rules of Art Subſervient to it. Thus Accompliſh'd, an *Architect* is perfectly qualified to anſwer all the *Tranſcendences* of this Noble *Art*, which is to Build *Handſomly*, *Solidly* and *Uſefully*.

We have already ſpoken of *Workmen*, and *Manuary* Aſſiſtants, in the foregoing *Paragraphs*, without whoſe more than ordinary Skill and Diligence, the Learned'ſt Architect miſtakes the Shadow, for Subſtance, *umbram, non rem conſecutus videtur*, and may ſerve to rear a *Tabernacle*, not Build a *Temple*, there being as much difference between *Speculation* and *Practice* in this *Art*, as there is between a *Shadow* and a *Subſtance*; but with what Advantages thoſe Perſons proceed who both know, and can apply, I have already

Demonſtrated; and when we conſider that the whole *Art* conſiſts in the moſt Exact and Elegant Order imaginable, it is not to be wondered there have been ſo few able Men of the *Profeſſion*: Sir *H. Wotton*, who reckons thoſe two Parts for one, that is, the fixing of the *Model* to a full Expreſſion of the firſt *Idæa*, paſſes (with our *Maſter*) to the *Species* or kinds of this *Diſpoſition*.

Taxis.

Taxis, or as *Architects* call it, *Ordonance*; as defined by our *Maſter*, to be that which gives to every part of a Building the juſt *Dimenſion*, relating to its Uſes Mr. *Perault* ſuppoſes neither ſo explicit, nor as the Thing it ſelf requires, or anſwerable to the Intention; which he takes to conſiſt in the *Diviſion* of the *Plan* or ſpot of Ground on which one intends to Build; ſo to be apportioned and laid out (as to the Dimenſion of the reſpective parts, referring to their Uſe) as conſiſts with the Proportion of the whole and intire Fabric; which in fewer Words, I conceive differs little from the Determinate Meaſures of what's aſſigned to Compoſe the ſeveral *Appartments*; to which ſome add, That which gives the utmoſt Perfection to all the Parts and Members of the Building: But (to proceed with the Learned Commentator) 'tis the judicious Contrivance of the *Plan* or *Model*, which he means by *Ordonance* here: As when, for Inſtance, the *Court*, the *Hall*, *Lodgings* and other Rooms are neither too large, or too little: *v. g.* That the *Court* afford convenient Light to the Appartments about it, and be large enough for uſual Acceſs; That the *Hall* be of fit Capacity to receive Company: The *Bed-Chambers* for Perſons of Quality, and others: Or elſe when theſe Diviſions are either too great, or too ſmall, with Reſpect to the Place: As a very *large Court* would be to a *little Houſe*, or a *little Chamber* in a Great and Noble *Palace*: Whereas *Diatheſis*, Diſpoſition, is where all the Parts and Members of a Building are aſſign'd their juſt and proper Places, according to their Quality, Nature, Office, Rank and Genuine Collocation; without Regard to the Dimenſion or *Quantity*, which is another Conſideration, as Parts of *Architecture*; tho' ſtill with Relation to its Perfection. Thus the *Veſtibule* or Porch, ſhould precede the *Hall*; The *Hall* the *Parlor*, next the *Withdrawing-Room*, which are of Ceremonie, I ſpeak (as with us in *England*) where the *Firſt Floore* is commonly ſo Compoſed of: The *Anti-Chambers*, *Bed-Chambers*, *Cabinets*, *Galleries* and Rooms of *Parade* and State in the Second Stage, ſuitable to the Expenſe and Dignity of the Owner: I ſay nothing of the *Height*, and other Dimenſions; becauſe there are Eſtabliſh'd *Rules*: But it is what I have generally obſerved, Gentlemen (who are many times at conſiderable Charges in otherwiſe Handſome and Convenient Houſes) moſt of all to fail in; not allowing Decent *Pitch* to the reſpective Roomes and Appartments, which I find they conſtantly Repent when 'tis too late: One ſhould ſeldom therefore allow leſs than *Fourteen Feet* to the *Firſt Floore*; *Twelve*, or *Thirteen* to the *Second*, in a dwelling Houſe of any conſiderable Quality; to greater Fabrics, and ſuch as approach to *Palaces*, 16, 18, 20, *&c.* with Regard to other Capacities: Nor let the leſs Benign Temper of the *Clime* (compar'd with other Countries) be any longer the pretence; ſince if the Building and Finiſhing be Stanch; the *Floors* well lay'd; *Appertures* of *Doors*, and *Windows* cloſe; that Objection is anſwered; The ſame Rules as to the Conſequence of Rooms and *Oeconomie* is to be obſerved in the Diſtribution of the other *Offices*, even the moſt Inferior, in which the Curious conſult their *Health*, above all Conveniency; by deſigning their beſt Lodging-Chambers towards the *Sun-riſing*; and ſo *Libraries*, *Cabinets* of Curioſities and *Galleries*, more to the *North*, affording the leſs Glazing and fitteſt *Light* of all other to *Pictures*, *&c.* unleſs where ſome unavoidable Inconvenience forbid it. Another great *Miſtake*, I likewiſe have obſerv'd to be the Cauſe of many Errors as Incurable; namely, a Fond, Avaritious, or Obſtinate Reſolution of many; who having choice of Situations; for the ſparing of an old *Kitchin*, Out-*Houſe*, *Lodge* or Vulgar Office; nay and ſometimes of an *Antient Wall*, a fine *Quick-ſet Hedge*, particular *Tree* or two or the like; continue to place the *New-Building* upon the *Old Foundation*, tho' never ſo much awry and out of all Square; and (as often I have ſeen) neere ſome Bank of Earth, which cannot be mov'd; pleas'd with *Front* or Gaudy *Out-ſide*, whilſt all is Gloomy and Melancholy *within*, and gives Occaſion of Cenſure to the Judicious, and Reproach to others; In a Word, I have very rarely, or as ſeldome found a New-Building joyn'd with any tollerable Decency or Advantage, to an Old one, as a Young and Beautiful *Virgin*, to an Old, Decay'd and Doating *Husband*: I might almoſt affirm as much concerning *Repaires*, where there are great Dilapidations; Since by that time they have Calculated all Expences of pulling down and patching up; they might have Built Intirely New from the Ground, with the ſame, and oftentimes, with leſs Charge; but with abundance more Beauty and Conveniency: Frequent Inſtances of like Nature might I produce, and of ſuch as have too late Repented; But I am to beg Pardon for this *Tranſcurſion*, for which I have no other *Apology*, than that ſince another *Edition* of this Piece is never likely to come under my Hand again; I have taken the Liberty of *this* to ſpeake my Thoughts the more freely; not without hope, that ſome may be Edified by it, and have Cauſe to thank me for it.

To return therefore whence I diverted; I now proceed to the proper Argument, and Deſign of this Diſcourſe, which concerns the *Terms* of *Architecture*, with ſuch Improvements as fall in with the Subject: Not that our *Politer Workmen* do not underſtand them well; but for the Benefit, and Inſtruction of the leſs knowing; or ſuch, who, tho' Learn'd, and knowing in other *Arts*, may haply not have much conſider'd this, and the firſt is,

Inchnographia.

Ichnography, by which we are to underſtand the very firſt *Deſign* and *Ordinance* of a Work or Edifice, together with every *Partition* and *Opening*, drawn by *Rule* and *Compaſs* upon the *Area* or Floor, by *Artiſts* often call'd the *Geometrical Plan* or *Plat-forme*, as in our Reddition of the *Parallel*: The *Greeks* would name it ἴχνους γραφὴ *Veſtigii Deſcriptio*, or rather *Veſtigium Operis*, the ſuperficial efformation of the future Work, which our *Ground-plot* does fully interpret. This is properly the Talent and Work of the Chief *Architect* or *Surveyor* himſelf (and indeed the moſt Abſtruſe and Difficult) by which he expreſſes his Conception and *Idea* for the Judicious Collocation, Idoneous and apt Diſpoſition, right Caſting and Contrivement of the ſeveral *Parts* and *Rooms* according to their diſtinct *Offices*, and *Uſes*; for as *Ordonation* imports the *Quantity*, ſo does *this* the *Quality* of the *Building*, but of this already, to this ſucceeds

Orthographia.

Orthography, or the erect Elevation of the ſame in *Face* or *Front* deſcrib'd in Meaſure upon the former *Idea*, where all the *Horizontal* Lines are *Parallels*: Some do by this comprehend the *Sides* likewiſe (but ſo will not I) to be ſeen as well within as without the *Model*. It is in Truth but the ſimple Repreſentation of that Part oppoſite to the Eye of the Beholder, and thence by *Italian* *l' Alzato* or *l' Impiedi*, *facciata* and Frontiſpiece, without *Shadows* or other deceptions, and the Second *Species* of *Diſpoſition*. The laſt is,

Scenographia.

Scenography, or (as ſome) *Sciography*, which is the ſame *Object* elevated upon the ſame *Draught* and *Centre* in all its *Optical* Flexures, Diminutions and Shadows, together with a fore-ſhortning of a *Third* Side, ſo as the whole *Solid* of the *Edifice* becomes viſible in *Perſpective* (as they ſay) becauſe compoſed of the *Three* Principal *Lines* uſed in that Art, *viz.* that of the *Plan* or *Plot*, belonging to the firſt *Idea*; that of the *Horizon* or Eye-line, which denotes the *Second*; and the *Line* of *Diſtance* which makes the *Third* with all its *Adumbrations* and ſhadowings, which diſtinguiſhes it from what they call the *Profile* ſignified by the Edging ſtroaks by ſome call'd out Lines, and *Contours* only, without any of this Solid finiſhing. From all which it appears, That not the bare *Idea*, or *Species* (as the Term is in *Vitruvius*) or as others, the various Kinds of *Diſpoſition* is to be underſtood; but the ſeveral *Deſigns* and Repreſentations of the *Diviſion*: Seeing in Truth, theſe three *Draughts* upon Paper, belong as much to the *Ordonance* as the *Diſpoſition* ſhewing and deſcribing the Meaſures and Dimenſions of the Inſpective Parts, *Order* and *Poſition*: From theſe three *Ideas* then it is, that ſame *Eurythmia*, Majeſtic and *Venuſta ſpecies Ædificii* does Reſult, which Creates that agreeable Harmony between the ſeveral Dimenſions; ſo as nothing ſeems Diſproportionate, too long for this, or too broad for that, but Correſponds in a Juſt and Regular

Profile.

Eurythmia

Symmetry and Concent of the Parts with the whole: For *Symmetry* is the Parity and Equality between the Parts Oppoſite; ſo as one be not bigger, higher, longer, ſhorter, cloſer, or wider than the other: Suppoſe a *Column* ſwelling more at one ſide than the other; and not as thoſe who thought it to Conſiſt in the proportion of ſome Principle Part or Member only, *Capitel* or *Cornice*, groſſer or projecting farther than the *Order* permits; which ſeem two different Things; whilſt *Proportion* among *Architects* conſiſts in ſuch an agreement and conſent as we find in every well limb'd and compos'd *Living Animal*, of whatever *Species* or kind ſoever, where the due *Make* of each Member of the Body denominates the Compleatneſs of the *Figure*, be it *Statue*, or the *Life*; and the ſame in *Building*, and the parts thereof; in a Word, where *Convenience*, *Strength* and *Beauty* meet and render it accompliſh'd. Laſtly, *Symmetria*

Decor, which is not only where the *Inhabitant*, and *Habitation* ſuite, ſeeing that is many times accidental; but where a *Building*, and particularly the *Ornaments* thereof, become the *Station* and *Occaſion*, as *Vitruvius* expreſly ſhews in appropriateing the ſeveral *Orders* to their Natural Affections; ſo as he would not have ſet a *Corinthian Column* at the Entrance of a *Priſon*, nor a *Tuſcan* before the *Portico* of a *Church*, as ſome have done among us, with no great Regard to the *Decorum*: Here therefore it is, That the *Judgment* of an *Architect* ought to be Conſulted, ſince even in the Diſpoſition of the *Offices* of our moſt private Houſes, we find no where greater Abſurdities committed, whilſt we many times find the *Kitchin* where the *Parlour* ſhould have been, and that in the firſt and beſt Story, which ſhould have been damned to the lowermoſt and the worſt. *Decor.*

Philander ſeems to be in ſome doubt whither the *Architect* did after all this make a *Model* of his future Work, but at laſt reſolves it in the *Affirmative* for many Reaſons, *ita enim futura deprehenduntur errata, & minimo impendio, nulloque incommodo*, &c. for ſo (ſays he) future *Errors* may be timely prevented, with little coſt, and without any trouble before the Remedy proves incorrigible. Now tho' perhaps an accompliſh'd *Architect* needs it not, yet as there is nothing certainly ſpar'd to leſs purpoſe, and more to the detriment of Builders than the ſmall Expence of making this *Prototype*; ſo it has been known that ſome Excellent *Maſters* have without Reproach, cauſed ſeveral to be made of the ſame Building, and for the better and which ſhould be fram'd with all its *Orders*, and *Dimenſions*, by the Aſſiſtance of ſome skilful *Joyner*, or other Ingenious *Artiſt* in ſome ſlight Material, which may be to remove, uncover and take in pieces, for the Intuition of every *Contignation*, *Partition*, *Paſſage*, and *Aperture* without other Adulteration by *Painting* or gaudy Artifice, but in the moſt ſimple manner as Sir *H. Wotton* prudently adviſes, *Modulus.*

for Reaſons moſt Material and Unanſwerable; This is by ſome ſupplied with a *Perpendicular Section* of the *Orthographical Elevation*, which lets the Eye into the Rooms in front only; the *Model* into the whole; but from all which we may deduce how abſolutely neceſſary it is, that an *Architect* have more than a Vulgar Dexterity in the Art of *Deſigning* and Drawing, *Quæ autem conferant, imo, quæ ſint Architecto penitus neceſſaria ex artibus, hæc ſunt, Pictura & Mathematica; in cæteris doctuſne ſit, non laboro*: So the *Patriarch*, lib. 9. upon that of our *Maſter*, lib. 1. c. 1. *Peritus Graphidos*, &c. and then concludes, *Neceſſaria igitur eſt Architecto Graphidis (i. e.) deſignationis ut Itali dicunt peritia*, as being a thing altogether indiſpenſable; but of this already, for by the *Method* of a Compleat *Courſe* or *Body* of *Architecture*, one ſhould proceed to the more particular Diſtributions of this *Art*, whither in Reſpect to Private or Publick Buildings, but I leave it for ſome perfect Edition of what remains of the incomparable *Palladio*; when either by the ſame it is begun, or by ſome other Charitable Hand, That, or our Maſter, *Vitruvius* himſelf, as Publiſh'd by the Learned *Perault* ſhall be taught to ſpeak *Engliſh*; and the *Title* of this *Diſcourſe*, which minds me of a through *Explanation* of the more difficult *Terms* of this *Art*, for being principally, if not only Converſant about the five *Orders* and their *Ornaments* (the ſubject of our Learned *Parallel*) calls me back to a diſtinct Survey of them, and I will begin at the Foundation.

Fundamentum.

Now tho' all that is buried in the Ground to the *Area* be ſo call'd, yet properly *Foundation* is the very *Cofer* or *Ground-bed* ſearch'd *ad ſolidum, & in ſolido*, as our *Maſter* adviſes, and upon which a wiſe Man would only Build and raiſe the *Proto ſubſtruction*, or firſt beginning of his Wall, and ought commonly to be double the thickneſs of the *Superſtruction*. This the *Greeks* call'd,

Stereobata.

Structura. Inſtructio. Subſtructio

Stereobata στερεοβάτης *ſolidum fulcimentum*, for its artificial firmneſs, as immediately ſucceeding the underſilling of the former (for ſo we name thoſe dry *Materials* upon the Surface) to be the *Baſis* of the whole *Edifice*: I am not ignorant that ſome contend about this *Office*, confounding it with the *Stylobata* and *Pedeſtals* of *Columns*, aſſigning them a regular thickneſs of half as much more as the *Orders* they ſupport; and then the *Italians* call it the *Zoccolo*, *Pillow* or *Die* (becauſe of its *Cubique* and ſolid Figure: But I rather take it for the *Baſamento* of the *whole*, which I would therefore rather augment than contract to that ſtinted dimenſion: The Reverend *Daniel Barbaro*, c. 8. l. 2. deſcribes us all the kinds of them, and calls this in particular (and which confirms this diviſion) the concealed part, or *fundatio in imo*: And then by this elegant *diſtinction* defines *Structura* to be that of *Fronts*; *Inſtruction*, that of the *middle* Parts; and *Subſtruction*, of the *Lower*; though this laſt Notion does likewiſe many times import ſome vaſt and magnificent Building; for ſo *Baldus* has cited that paſſage in *Liu.* l. *6.* where he names the ſtately *Capitol* a *Subſtruction* only, and other Authors *Subſtructiones inſanas*, for ſuch vaſt and enormous Fabricks: But that we may not omit the *Pedeſtal* (though of rarer uſe amongſt the *Ancients*) I come next to the

Stylobatum. Pediſtal.

Stylobata; For our *Pedeſtal* is *vox Hybrida* (a very mungrill) not *à Stylo*, as ſome imagine, but *à Stando*, and is taken for that ſolid *Cube*, or ſquare which we already mentioned to be *that* to the *Column* impoſed, which the *Superſtructure* is to *this*, *Fulcimentum Columnæ*: It is likewiſe call'd *Truncus* the Trunk (though more properly taken for the *Shaft* or *Body* of an *Order*) contained between the *Cornice* and *Baſe* (for *Pedeſtals* have likewiſe thoſe *Ornaments* inſeparably) alſo *Abacus*, *Dado*, *Zocco*, &c. which is ſometimes Carv'd with *Baſs-relievo* in Hiſtorical *Emblems*, as that of *Trajans* at *Rome*, and ours on *Fiſh-ſtreet* Hill: But as it was rarely uſed among the *Antients*; ſo they were all *Square* alike to all the *Orders*: till from good Examples, by later *Architects*, (and eſpecially *Palladio*) reduc'd to Proportion and very graceful. Thoſe which are more large than high, are called *double Pedeſtals* ſupporting double *Columns*, and ſome which are continu'd thro' the whole Building. Alſo *Poggio*, from its Office of ſupporting, and then 'tis conſtantly adorn'd with a *Cornice* conſiſting of a *Cymatium* on a *Corona* with *Liſts*, and ſometimes *Scotia* or ſhallow *Cavities* and an addition of an upper *Zocco* or *Plinth* of a ſmaler hollow and part of the *Cymatium*, upon which the *Scamilli impares Vitruviani* were ſet, if deſign'd for *Statues*: Or, if without, for *Columns*. The *Baſe* has likewiſe an *Ornament* of a *Cymatium inverted* upon a *Plinth*, as may be ſeen in the *Corinthian Stylobata*: The general Rule is to divide the whole into 19 Parts; the *Pedeſtal* ſhall have 4, the *Intablature* 3, but if a *Column* be without *Pedeſtal*, Divide the height but into 5 equal Parts, 4 to the *Column*, and to the *Entablature* 1: But, as we affirm'd, the *Antients* did ſeldom uſe *Pedeſtals* at all, unleſs where *Railes* and *Baluſters* were requiſite, and *Parapet* walls for *Meniana*, *Pergolas* and *Balconies*, and where they ſerv'd for *Podia* or *Poſaries* of a leaning Height, for which they had a ſlight *Cornice* aſſign'd them; and this minds me of the στῆλαι among the *Greeks*, as indeed ſeeming to have been deriv'd from the Eaſtern אֲצִילֵי uſed, and to the *Jews* (we read) enjoyn'd upon their flat-roofed Houſes, theſe *Baluſters* being in truth but a kind of petty *Columns* under the Railes or *Architrave* between *Pedeſtal* and *Pedeſtal* for that moral Reaſon, the ſecurity of the Walkers, eſpecially at what time they uſed to ſpread *Tents* upon them, as frequently they did: But if (as we ſaid) for the better eminence of *Figures*, then with the Impoſition of

Scamilli. *Scamilli impares*, of which there is ſo much contention amongſt our *Hypercritical* Architects, though in fine they prove to be but certain Benches, *Zoccos* or Blocks elevating the reſt of the Members of an *Order*, *Column*, *Signum* or *Statue* from being drowned or loſt to the *Eye*, which may chance to be plac'd below their *Horizon*; that is, beneath the Projectures of the *Stylobata Cornices* and other *Saillies*, by an agreeable Reconciliation of *Geometry* with the *Opticks*: In a Word, the *Pedeſtals* of *Statues* do well expreſs them, and thoſe half-round Elevations, or other unequal Eminences upon the *Stylobata*, be they *one* or more *Plinths*, like ſo many ſteps ſucceeding one another for the Advantage of what ſtands upon them: In the mean time, we find no *Proportions* or form aſſign'd for the placing *Statues*, *Buſts* or other *Figures*, which ſeems to be left Arbitrary, with regard to the Subject: The lower *Pedeſtals* beſt ſuiting with the higher, contrary to *Buſts*, or where more than one together, as *Groups* ſitting, and *Cumbent* Figures, which require longer, *&c.* with ſuch Ornament and Decoration as beſt becomes them; as to *Nymphs*, *Tritons*, *Sea-Gods*, *Eſcalop-Shells*, &c. to *Deeſſes*, the more Delicate, to *Satyrs*, *Ruſtic* Work, &c. But to proceed to the *Orders* and their ſeveral *Members* as they Naturally riſe in Work.

Baſis. The *Baſe* deriv'd from the *Greek* Verb βαίνειν imports the Suſtent, Prop or Foot of a Thing, and is in *Architecture* taken not for the lowermoſt Member of an *Order*, but for all the ſeveral Ornaments *Spira.* and Mouldings from the *Apophyges* or riſing of the *Columns* ſhaft, to the *Plinth*: Sometimes alſo for the *Spire*; which lying on the *Plinth* like the *Coile* of a Cable derives thence its Name, though ſomething improperly methinks, conſidering theſe Members do not run Spiral, but Obliquely rather and *in orbem*: In ſum, the *Baſis* is to the *Column* and its *Entablature*, what the *Stylobata* is to the *Baſis*, and the *Stereobata* to the *Pedeſtal*. Here Note, that when a *Cornice* is added to a *Baſe*, it becomes a *Pedeſtal*, and that to the *Corinthian* or *Compoſita* the *Attic Baſe*, and tho' faireſt of all, and us'd in other *Orders*; by no means ſo properly: It is often inrich'd with Sculpture, eſpecially in the *Compoſita*; for *Baſes* differ according to the *Order*: *Tuſcan* has a *Torus* only; the *Doric* an *Aſtragal* more, by ſome eſteem'd a modern Addition: The *Ionics Torus* is larger on a double *Scotia*, betwixt which are two *Aſtragals*: The *Compoſita* an *Aſtragal* fewer than the *Corinthian*. The *Attic Baſe* (or as ſome, the *Attic-Curgi*) conſiſts of a *Plinth*, two *Torus*'s and *Scotia* properly plac'd under the *Ionic* and *Compoſita*, and indeed as was ſaid, to all, *Tuſcan* excepted, which has its peculiar *Baſe*: But to proceed to other particulars.

The *Plinth* is the firſt, and very loweſt Member of the *Baſe.* *Plinthus.* The Word denotes a *Brick* or ſquare *Tyle* of which happly they were uſually made, but rather for the reſemblance; becauſe of the weight it was to bear, and therefore more probably of ſomething more ſolid to preſerve the Foot of the *Column* from rotting, when firſt *Pillars* were made but of the Tapering Bodies of *Trees*, as we ſhall ſhew hereafter: *Plinth* is likewiſe taken for a like Member about the *Capitel*, but then always with its Ajunct, *the Plinth of the Capitel*, &c. becauſe placed juſt above the *Echinus* as in the *Doric*, *Ovolo* or quarter round in the other *Orders*. The *Italians* familiarly name it *Orlo*, which importing a round Welt, Hem or Brim, methinks is not ſo properly applied to it: By *Plinth* is alſo to be Underſtood any flat, thick *Moulding* in the Fore-Walls of any Building, ranging like a broad *Liſt* with the ſeveral *Floors* or Stages. The next is,

Torus, the third Member of the *Baſe* (of which there is *Superior* and *Inferior* in the *Baſes* of all the *Orders*, the *Tuſcan* excepted) *Torus.* comes from τόρος denoting the roundneſs and ſmoothneſs of it; *Torus enim quiquid rotundum*, or rather as *Scaliger*, *quod artificialiter elaboratur & tornetur*, becauſe artificially made ſo; but why not from its ſwelling and brawnineſs? It much reſembles the Shape of a round Cuſhion, *Torques* or Wreath, thence στιβὰς, and the impoſed weight makes it ſeem to ſwell out as if indeed it were ſtuffed, and that with Reaſon ſay the *Critics* for the more eaſy and ſafe Poſition of the

Trochile, from τρέχω or τρόχα a Rundle or Pully-Wheel which it *Trochilo.* much reſembles, and is that Cavity appearing next to the *Torus*: The *Italians* name it *Baſtone*, or more properly *Cavetto*, and *Cortice*, *tanquam baculi cortex*, the hollow Rind of a Tree, as *Barbaro*. Our Workmen retain the Ancient *Scotia*, from Σκοτία, its obſcurity proceeding *Scotia.* from the Shade of the hollowneſs, but more vulgarly they call it the *Caſement*, and it is ever the Cavity between the former *Torus*'s, and alſo beneath the *Doric Cornice* ſeparated from the plain Margin or *Regula* call'd *Mentum* and *Corona* by a ſmall *Cymatium*, or ſometimes a *Liſt* only: The Capital Letter C is almoſt a perfect reſemblance of this *Moulding*, and it is indeed frequently bordured or rather ſhut in with *Liſts*. Laſtly,

The *Aſtragal*, which beſides divers other Things (as the *Septem* *Aſtragalus.* *ſpinæ Vertebræ* neer the Neck) has here its Analogy from that Bone a little above the *Heel*, whence the *French* name it the *Talon* or Heel it ſelf (as our Author of the *Parallel*) nor improperly; but by the *Italians*, *il Tondino* being a kind of half *Torus*, ſometimes wrought in the richer *Orders* like an Over-caſt Hem or Edge to the larger *Tore*, which frequently is plac'd between, as in the *Ionic* Baſe with two *Scotias*, and ſometimes (though rarely) juſt about the *Plinth* of the *Baſe*, as ſome marſhal it: Otherwhiles again it is taken for the *Hoop*, *Cincture* or *Coller* next the *Hypotrachelium* and diminution of a

Column liſted on both Edges; and it runs alſo under the *Echinus* of the *Ionic.* Our *Engliſher* of *Hans Bloome* names it a *Boltell*, or *Fillet* in any part of a *Pillar*, but I take a *Fillet* to be more flat, this more ſwelling, and (as I ſay) *Torus*-like. Moreover we ſometimes find it dividing the *Faſcia* of the *Corinthian Architrave* where it is wrought in *Chapletts* and *Beads*, *Olives* or *Berries*; and finally in two places, both above and beneath the *Liſts* joyning immediately to the Square or *Die* of a *Pedeſtal* where *Stylobata* is introduced; and ſo we have done with the Ornaments and *Mouldings* of the *Baſe*: We come now to the *Column* it ſelf.

Στῦλος nakedly, and ſtrictly taken, is that Part of an *Order* only, *Columnæ* which is the Prop or *Columen*, plac'd to ſupport ſomething Superior to it, and is here properly that round and long *Cylinder* diverſly named by Authors, *Scapus*, *Vivo*, *Tige*, *Shaft*, *Fuſt*, *Trunke*, &c. containing the Body thereof from the *Spire* of the *Baſe*, or lately mentioned *Aſtragal*, to the *Capitel*: Sometimes for the Subſtance and Thickneſs of the bottom of the *Pillar*, and in *Authors* for the *Checks* of a Door *Secundum Cardines & Antepagmenta*, of which conſult the Learned *Baldus* in the Word *Replo de Sig. Voc. Vitr.* alſo the Perpendicular *Poſt* of a *Winding-ſtaires*; but for the moſt part for that *Solid* of a *Column* which being divided into three Parts, has (as ſome delight to form them, but without any Reaſon or good *Entaſis.* Authority) an *Entaſis* or *Swelling*, and under the *Collerine* or *Cimba* of the *Capitel*, a Contracture and comely *Diminution*, by Workmen call'd the breaking of the Pillar; which in Imitation of the natural Tapering of *Trees*, is ſometimes too much contracted, in others exceſſively ſwell'd. The manner of Operation by applying a thin flat Flexible *Rule*, of the length of the whole *Column*, divided into three equal Parts, beginning at the Perpendicular of the loweſt, is ſo well known, that I need ſay nothing more of it, than that there is hardly any ſenſible Swelling to be perceiv'd in the beſt Examples, and therefore to be ſparingly us'd, and with Diſcretion if at all: or as *Diſgradet* and ſome affect, tapering very inſenſibly all the way: *Monſieur Perault* preſcribes another Method for this Diminution(ſpeaking of *Nicomedes's* firſt *Conchoid*, in his learned Comment, *l.* 3. *cap.* 2d. But (returning to where we left) the primary Iſſue or Riſe of the *Shaft* next the *Aſtragal* and neather *Cincture* is call'd *Apophyges.* the *Apophyges* from the *Greek* Word ’Αφπουγὴ; becauſe in that part the *Column* taking as it were a *Riſe*, ſeems to Emerge and Fly from the *Baſes* like the *Proceſſus* of a Bone in a Man's Leg; and ſo it is now and then applied to the Square of *Pedeſtals* likewiſe. In ſhort, 'tis no more than an imitation of the *Rings* or *Feruls* heretofore uſed at the Extremities of Wooden *Pillars*, when formerly they were made of that Material, to preſerve them from ſplitting, afterward imitated in Stone-Work as an inſeparable part thereof; and thence doubtleſs it is they took their original Contraction: Such Trees as grew in the moſt upright Tenor and comely Diminution, being choſen for this Employment.

Theſe being reſembled in *Stone* (that is of one entire one) by *Solidæ* were diſtinguiſh'd from the *Structiles*, or were ſuch *Pillars* as were Compounded of many:

But it is not here only that theſe *Rings* have place, but next the above deſcrib'd *Aſtragal* likewiſe, and where-ever encounter'd by the Names of *Annulus*, *Cincta*, *Cimbia*, *Liſtello*, *Fillets*, *Regula*, &c. broader or more narrow as beſt ſuits with the Conſecutive Member; like thoſe very ſmall *Liſtellos* or *Annulets* under the *Echinus* of the *Doric* Capitel, by the *Italians* call'd *Gradetti*, Degrees, and by the Interpreters of *P. Lomazzo*, Rulers; and ſo in like manner the *Cimbia* beneath the *Aſtragal* immediately above the *Contraction*. But *Regulæ* and *Fillets* are ſomewhat larger in places where they edge and ſhut in the *Cymatium* of a *Cornice*, *Abacus*, or *Voluta*: Moreover I Note, That *Liſtello* and *Cincta* are broader than *Annulets* which I take to be the very leaſt of all the *Mouldings* in an *Order*.

The *Capitel*, with its *Ornaments* comes now to be the next collective *Member*. *Capitel.*

We have already ſhew'd what we are to Underſtand by a *Column*, which nakedly conſidered, does not aſſume the Name of *Order*, till it be dreſſed and habited with its diſtinguiſhing Ornaments, the *Capitel*, &c. For tho' by *Ornament* Architects in one Word, ſignifie *Architrave*, *Frieze* and *Cornice*, which ever Accompany and Compleat the *Order*; yet 'tis the *Capitel* only which gives its diſtinction and denomination: And albeit their differences may indeed be alſo taken from the Height, Shape and Subſtance, yet hardly without their *Heads*, as the *Ionicæ* and *Corinthian*. We proceed therefore to the Second Member towards the upper Part or *Diminution* of a *Column* (which is always the leſs abated if very tall, becauſe the Diſtance effects that in them, which *Art* produces in the lower) is the

Hypotrachelium, which from the *Greek* ὑποτραχήλιον *colli pars infra cervicem*, denotes the Neck of the *Column*, being that part of *Scapus* below the *Aſtragal*: It is as it were the *Freeze* of the *Capitel*, and ſo by ſome term'd, as alſo the *Coller* and *Gorgerin*, where the *Pillar* is moſt Contracted and ſeems as if it were ſtrangled, and may well be taken for a part of the *Capitel* it ſelf, having both in the *Tuſcan* and *Doric* another *Annulus* or *Cincta* about it next to the

Echinus, a *Bottle* cut with an Edge, as in our *Bloome* 'tis rudely explained: It is indeed a quarter round, and ſometimes more, ſwelling above the *Cinctures*, and commonly next to the *Abacus*, Carv'd with *Ovals* and *Darts* (by our Workmen call'd *Eggs* and *Ankers* as little Politely) which is frequently ſhut up with a ſmaller *Ovolo* of *Beads* and *Chaplets*, or like Ornament; but ſo adorn'd, it commonly runs under the *Ionic Voluta* and that of the *Compoſita*, and next the *Doric Abacus*; as in that ſingular Example of the *Trajan Column* it creeps under the *Plinth* of the *Capitel*. Such as pretend to *Etymologies* for every thing they hear, will have it ἐχῖνος παρὰ τὸ ἔχειν, or συνέχειν ἑαυτὸν because of a kind of Self-contraction; others more rationally from the reſemblance and roughneſs in the Carving ἐχίνȣ τραχύτης as briſtling with its Darts like a *Hedge-Hog*, or rather the thorny Husk of a *Cheſt-nut*, which being open'd diſcovers a kind of Oval Figur'd Kernell, which dented a little at the Top, the *Latins* call *Decacuminata Ova*. Under this, as we ſaid, is a ſmaller *Bracelet* again which incircles the *Capitel* under the *Voluta* in the *Compoſita*, taken for the *Fuſerole*; and ſo likewiſe in the other *Orders* where the *Ovolo* or *Echinus* properly enter, having a ſmall Moulding beneath it by *Palladio* nam'd *Gradetto*, but of this already: In the *Corinthian* an *Echinus* frequently comes in betwixt the *Corona* and *Dentilli*.

Voluta. The *Voluta*, or as we term it properly enough, the *Scroul*, is not the derivative of any *Greek* Word, but the *Latin Voluta*, *à Volvendo*, for that it indeed ſeems to be roll'd upon an *Axis* or Staff; *Alberti* calls them *Snails* Shells from their *Spiral* turne: It is the Principal, and only appropriate Member of the *Ionic Capitel* which has *Four* in imitation of a Femal Ornament, as both our *Maſter Vitruvius*, and the Author of the *Parallel* have Learnedly Illuſtrated. The *Face* of it is called *Frons* the Fore-head, a little hollow'd between the Edge or *Liſt*, and the *Return*, *Pulvin* or *Pillow* betwixt the *Abacus* and *Echinus* reſembles the Side-plaited *Treſſes* of *Womens* Hair, to Defend as it were the *Ovolo* from the weight of the *Abacus* (over which the *Voluta* hangs) and ſuperior Members, for the ſame Reaſon as was intimated in the *Torus* of the *Baſe*.

There are alſo *Voluta*'s in the *Corinthian* and *Compounded Capitels*, whereof the firſt hath *Eight*, which are Angular, the reſt conſiſting rather of certain large *Stalkes* after a more *Groteſco* Deſign, as may be gathered from thoſe *Rams Horns* in the *Capitel* of the *Columns* taken out of the *Bathes* of *Diocleſian*: And in Truth they are only the pretty Flexures and Scrowlings of *Vitici* like the *Tendrells* of *Vines*, whereof the *Four* larger ones bend under the *Horns* or Corners of the *Abacus*, the other *Four* of leſſer Size, juſt under the middle of the *Arch* thereof, beneath the *Flower*: Then the Bottom or Foot of the *Calathus* or *Panier* (for that's divided into three equal Parts as will hereafter appear) ſhows in Front *two* entire *Leaves*, and as many half ones, *viz.* at the *Angles*, and betwixt thoſe again two *Stalkes*, which, with a *Tall one* in the middle (that touches the midſt of the *Arch* (as we ſaid) it puts forth a *Flower* upon the Brim of the *Abacus*) make in all *ſixteen* in number. To be yet as accurate as may be in ſo Nice and Florid an *Ornament*, theſe *Leaves* did of old reſemble either the *Acanthus* (though a little more Indented and Diſguiſed) from the Inventor *Callimachus*, or (as ſome) the *Olive* and *Palme*, for ſo it is warranted by *Villalpandus* from that *Capitel* of his Deſcription ſtanding in the *Temple* of *Solomon*. At the Extreames of theſe Leaves do iſſue the *Caules*, and *Codds* breaking with the *Helices*, the reſt of the *Stalkes* adorn'd and furniſh'd with Buds and tender Foliage by the Diſcretion and Invention of the Ingenious *Carver*. But the Domineering *Tendrells* and *Flexures* conſiſt of greater, or ſmaller *Volutas*, emerging from between the *Abacus* and *Echinus* in *ſmaller* Leaves and Stalks, *Midling* and *Inferior* Foliage, as they are diſtinguiſh'd by Workmen in the three above nam'd Diviſions of the *Calathus*; but inſtead of thoſe *Helices*, at our *Corinthian* Horns, the *Compoſita* has her *Voluta* much more reſembling the *Ionica*, and in lieu of *thoſe*, divers Capricious Fantſies, as *Horſes Heads*, *Eagles*, and the like; *ſed ea doctis non probantur*, they are rejected by all good *Architects*, ſays *Philander*. *Voluta* is likewiſe among the Ornaments of *Mutuli*, *Curtouſes*, &c.

Cathetus.

Now the *Center* or *Eye* of the *Ionic Voluta* is made by *Artiſts* with a *Cathetus*, which (not over nicely to diſtinguiſh from *Perpendicular*, becauſe the Operation of them proceeds from diſtinct Terms) is meant by a *Line* let down from above, interſecting the Line of the *Collar* (as 'tis demonſtrated in *Chap.* 24. of the *Parallel*, with the *Hiſtory* of its Inveſtigation) and that ſmall Circle at this Point of *Interſection* is Metaphorically *Oculus*, the *Eye*, from whence the Perfect turning of the *Voluta* has been after an exquiſite manner (tho' by few obſerv'd and practis'd) found out; it being here indeed that our *Workman* will be put to the Exerciſe of his *Arithmetic*, as appears by that accurate Calculation in *Nicholas Goldmanus*'s Reſtitution of this becoming Ornament. Laſtly,

Abacus.

The *Abacus* (from ἄϐαξ or ἀϐάκιον which ſignifies a Square *Trencher*, or *Table*) is that *quadrangular* piece commonly accompanied with a *Cymatium* (except in the *Tuſcan*) and ſerving inſtead of a *Corona* or *drip* to the *Capitel*, whereof it is the *Plinth* and Superior, as has already been noted. This it is which ſupports the neather *Face* of the *Architrave*, and whole *Trabeation*: In the *Corinthian* and *Compoſita* the *Corners* of it are nam'd the *Horns*, and are ſomewhat blunted and hollowed, the Intermedial *Sweep* and *Curvature* with the *Arch*, has commonly a *Roſe* or ſome pretty *Flower* Carv'd in the middle of it.

Capitulum.

Thus we have finiſhed that *Head* of our *Column*, which being taken in *General* for all theſe *Members* together, is commonly diſtinguiſh'd by the Name of *Capitel* (an Eſſential Member of every Order:) taken, I ſay, for the intire Ornament from the *Aſtragal* and firſt *Cincture* of it, to the *Plinth* which bears up the *Architrave*: But it is not to be omitted, that the main Body of the *Corinthian*

Chapiter (of which we have given a large Deſcription under the *Title* of *Voluta*) conſiſts of a *Bell*, or *Basket* rather, which is that plain and ſolid part under the *Cauliculi*, *Stalks*, and out of which they are Carved with *Helices*,*Tendrells* and *Flowers* already mentioned, and which in order to their triple *Series* of *Foliage* (which ſeems to include and ſhadow the Body of it as 'tis repreſented in that curious deſign of *Callimachus*'s Invention) is divided into *three* equal Parts: But of this hereafter. There is likewiſe another *Capitel*, or rather a Diminutive of it, by the *Greeks* call'd κεφαλίδιον, which does not only ſignifie (as ſometimes) the former *Calathus* and *Basket*, but more properly that *Braid* or *Liſt* above the *Triglyph* in the *Freeze*.

Moreover, to the Bodies or *Shafts* of ſome *Columns* appertain

Striges. *Striges*, which (not to inſiſt upon what the Learned *Voſſius* and other *Critics* have contended) are thoſe excavated *Channells*, by our Workmen call'd *Flutings* and *Groeves*: Theſe are particularly affected to the *Ionic* Order (rarely the *Doric*) *uti ſtolarum rugæ*, in imitation of the *Plaits* of Womens *Robes*, as our *Maſter* reſembles them; and ſome of theſe *Channells* we find to go winding about *Pillars*, &c. but it is not approved. *Striæ.* Between *theſe* are the *Striæ*, we may properly *Engliſh* them *Raies* or *Liſts*; which being twenty in the *Doric*, in the *Ionic* 24 in number, are thoſe plain Spaces between the *Flutings* in the *Ionic*, *Doric*, *Corinthian* and *Compoſed* Orders; which *Ornament* the *three* laſt have (with ſome ſmall Difference) borrow'd from the *Ionic*. And in ſome of thoſe (as in that *Diocleſian Doric* Example) they are *ſo* made, as to reduce the *Rays* to a ſharpe Edge only, by their Contiguity without any Spaces at all. But ſometimes we find the *Striges* to be fill'd up with a Swelling, a third Part from the *Baſe*, and theſe we may call *Stav'd*, or *Cabl'd Columns*; for ſo I think fit to Interpret the *French Embaſtone*, and *Alberti's Rudens*. Thus we find ſome *Corinthian* Pillars often treated; the *Stria* being commonly a third or fourth Part of the widneſs of the *Flutings*, (in the *Doric* not too deep) and diminiſhing with the *Contraction* of the *Scapus*, unleſs the *Shaft* be very high, in which Caſe the diſtance does it without the Aid of the Workman; ſometimes alſo we have ſeen them totally filled, and ſometimes wrought, but better plain: Note that where they exceed Twenty or Twenty four they make the *Columns* appear Gouty. We ſhould now come to the *Entablature*, but a Word of

Paraſtatæ. *Pillaſters*, or ſquare *Columns*, call'd by the *Greeks* (if ſtanding ſingle) *Paraſtatæ* or by the *Italians Membretti*. Obſerving the ſame *Module* and Ornament in *Baſe* and *Capitel* (if alone) with that of the intire *Column*; but ſo they do not for their *Prominencie*, which being to gain room and to ſtrengthen Works (Fortifie and Uphold capacious Vaults) reduces them ſometimes to the *Square*, whereof one of the ſides is frequently applied to *Walls*, by which alone ſome will only have them to differ from *Columns* themſelves; but that ought to be underſtood of ſuch as have no *Impoſts* and *Arches*, upon which occaſions the *Lights* they let in do much govern their Proportions, as *Palladio* has Judiciouſly ſhew'd in *l.* 1. *c.* 13. &c. Likewiſe, where they happen to be at *Angles*, and according to the ſurcharg'd weight; and therefore a *Ruſtic* ſuperficies (as Sir *H. Wotton* has Diſcreetly obſerv'd) does beſt become them, as well as a greater Latitude, for ſo they have ſometimes been enlarg'd to almoſt a whole *Vacuity*; unleſs where for their better Fortifying, we find *half*, and ſometimes whole *Columns* applied to them. As to the Extancy, ingag'd in the Thickneſs of the Walls, (for ſo we muſt ſuppoſe them to be) they ſometimes ſhew above a Fourth, Fifth or Sixth Part of their Square, but this is Regulated according to the Nature and Difference of the Work, which not ſeldom reduces it to an *Eight*, without any nice Reguards to what were requiſite if they ſtood alone ſeeing they are often deſtin'd to Stations which require the moſt ſubſtantial Props. For the reſt, they carry the ſame Proportion with their reſpective Orders, and are very rarely *Contracted*, unleſs where they are plac'd behind whole *Columns*: If *Fluted*, with not above Seven or Nine at moſt: Be this alſo obſerved; That as in the *Fronts* of Large and Noble Buildings, they ſhew very gracefully benig plac'd one over the other before the firſt and ſecond *Stories*; ſo in leſſer *Fronts* and Houſes they look but poorly: Laſtly, be this farther Noted; That tho' we find the *Doric Pillaſter* with *Trigliph* and *Metap* plac'd about the *Cupola*, 'tis by no means to be broken in any ſort, to humor the Angle of an *Upright Wall*, tho' there happen to be a *Cornice* above it, as we frequently find, allowing half to one *Face*, and as much to the other:

Pillaſters are likewiſe ſmaller or ſhorter applied to *Balconies*, &c. with now and then *Baſes*, *Plinth* and *Capitel*, and ſo in Ruails upon Stayers, *Battlements*, &c. They alſo do properly and handſomely where they are ſet to ſupport *Cornices* and *Freezes* in *Wainſcoted* Rooms; provided their due proportion be obſerv'd, without thoſe ridiculous Diſguizements of *Pedeſtals* and Idle fancie commonly wrought about them: They alſo well Adorn *Door-Caſes*, *Chimney-Pieces*, *Gallerie-Fronts*, and other places whence they are call'd

Ante, not improperly (as *Monſ. Perault* ſhews) from the *Latine Antæ*, for their being plac'd *Before* the Ancient *Temple Walls* and Coines ſtanding out to ſecure them, and ſo at the ſides of *Doors*: In ſhort, they are generally own'd among *Pillaſters*, obſerving the ſame Rule in advancing out of the Work, as *Columns* themſelves alſo do; otherwiſe (as was ſaid) *Pillaſters* us'd to appear very little beyond the Perpendicular of the Wall or Work, where there happen'd to be no *Ornament* above, which ſallied farther, in which caſe, the Projecture of both ought to be alike, or rather comply with that of the *Pillaſter*. The

Antæ.

Incumbæ. *Impoſts* (by *Vitruvius* call'd *Incumbæ*) which I mention'd, are nothing but their *Capitels* or more protuberant Heads, upon which reſt the ends of the *Arches*; which alſo muſt conform to their *Orders*; ſo as the *Tuſcan* has a *Plinth* only; the *Doric*, two *Faces around*; The *Ionica* a *Plancere* or Cavity betwixt the two *Faces*, with now and then carved Mouldings, as has likewiſe the *Corinthian* and *Compoſita* a *Freeze*; ſo as the *Sallies* of the *Impoſts* exceed not the Body of the *Pillaſter*: Sometimes again the *Entablature* of the Order ſerves for the *Impoſt* of the *Arch*, which is very Stately, as we ſee in divers *Churches*, to which the height exceedingly contributes, where the Projecture is ſuitable; in the mean time where they exceeded the *Square* and regular Thickneſs, they were nam'd

Pilæ. *Pilæ*, and their *Quadra's* or *Tables* (as we yet ſee them in antient *Altars* and *Monuments*) were employ'd for *Inſcriptions*; but if ſhorter, and more Maſſy, they ſerve for the *Arches* of *Bridges*, for *Buttreſſes* and the Suſtentation of more ſolid Works, as indeed they need to be, ſtanding in the Water; and gradually built as far as its Level; nor ought their Bredth be leſs than a *Sixth* part of the Wideneſs of the *Arch*, nor more than a *Fourth*: They were ſometimes made half Circular; but the *Antients* prefer'd the pointed at *right Angles* as better to reſiſt the impetuous Current, before the more Acute and Sharper.

Camera. *Arches* or *Vaults* conſiſting generally of ſimple *Half-Circles*, and now and then of ſome leſſer *Point*, of all other, require the Conduct of an able *Architect* well Skild in *Geometry*: I ſhall not need to Criticize on the ſeveral *Species*, of *Fornices* and *Cradle* Works, as of late Subdivided into more than we find among the Antients, which were not above Three or Four: The ſimple *Fornix*, or *Hemicircular*, Straite or Turning: The *Teſtudo* or more circular, and that which by the *French* is call'd *Cul de Four* and *Oven*-like; and the *Concha*, which like a Trumpet grows Wider as it Legthens, *&c.* Of theſe ſome are ſingle, ſome double, croſs, *Diagonal*, *Horizantely* on the Plaine, others Aſcending and Deſcending, Angular, Oblique, Pendent; ſome that Sallie out ſuſpending an incumbent Burden, of which there are both Concave and Convex, as for the giving Paſſage under upon Occaſion: But of whatever Form, or Portion of the *Circle*; Care muſt be had, that where they croſs, the *Reins* or Branches ſpringing from the ſame Point, and their Moulding alike, they neither crowd to neere one another, nor intangle confuſedly; but meeting from Angle to Angle, unite at the Key-ſtone, which is commonly carv'd with a Roſe or ſome other Ornament; it being in this Diſpoſition of the *Nerves* and *Branches*, wherein conſiſts the Artiſt great Addreſs, and that the *Concamerated* Spaces be exceeding cloſe Joynted, needing no Pegs, or fillings up with Mortar; and above all, that the Butments be Subſtantial: As now in *Cellars*,

Fornices.

Churches, &c. *Vault* and *Arch*-Work in warmer *Climats*, both in the Firſt and Second Stories, not without frequent and coſtly Sculpture, various *Fretts* and Compart'ments, of which we have Examples *Antient* and *Modern* far more Rich, Grave, and Stately, than thoſe *Gothic Soffits* groſs and heavy, or miſerably trifling: Another great Addreſs in *Vault-Work* is to render them light and *Lacunar.* cheerful, where they are raiſ'd above Ground, as well as Solid; eſpecially, where there is occaſion to contrive them as flat as poſſible; ſuch as are to be ſeen in many *Bridges*, eſpecially at *Piſa* over the *Arno* ſo flat, as the *Curvature* is hardly diſcernable; and tho' it conſiſts of three *Arches*, yet they are very large; and there are many at *Venice*, but not neere of that Length; That of the Famous *Rialto* over the *Grand-Canale*, is more exalted, being in the *Baſe* neere 200 Foot, the *Chord* much leſs than half the *Diameter*, *Arches* being ever ſtrongeſt, as they approach the half Circle: The *Maſonry* at the Front of theſe being cut by a peculiar *Slope* of the *Stone* is call'd *Pennanted*, till it come to joyn with the

Menſula which (*quaſi* μέσα) ſeems to be locked to the *Pennants* in Guize of a *Wedge*, and therefore by our Artiſts nam'd the *Key-ſtone*: *Menſula.* we have ſhewed their uſe where two *Arches* interſect, which is the ſtrongeſt manner of *Cameration*. Under the Title of *Arch-Work*, may not improperly come in thoſe *Scalæ Cochlides*, *Spiral*, *Annular*, *Camerati* *Oval*, and of whatſoever Shape, *Penſile*, and as it were, hanging With or without *Column*, receiving ſight from above; all of them requiring the Skillful *Geometrician*, as well as a *Maſter-Maſon*; Stairs in general being one of the moſt uſeful and abſolutely neceſſary *Scalæ.* Parts of an Houſe; and therefore to be contriv'd with good Judgment, whither of Stone or Timber; and ſo as with *Eaſe* and *Cheerfulneſs* one may be led to all the Upper Rooms. With *Eaſe* I mean, That the *Flights* be not too long, before one arrives to the *Repoſes* and *Landings*, without criticizing concerning the Number of Steps (which the Antients made to be odd) provided they exceed not 5 *Inches* in *Height*, or be leſs than 15 in *Breath*, one Foot being ſcarcely Tolerable: And albeit the Length cannot ſo poſitively be determin'd, but ſhould anſwer the Quality and Capacity of the Building; it ought not be ſhorter than *Five* and an *half*, or *Six* Foot; that two Perſons may commodiouſly aſcend together; I ſpeak not of thoſe (*Scalæ occultæ*) Back-Stayres, which ſometimes require much Contraction (and are more obnoxious to Winding Steps) But a Noble and Ample Houſe may extend even from 8 to 12 Foot in Length. And *here* I think not amiſs to Note, That the *Antients* very ſeldom made uſe of *Arched Doors* or *Windows*, unleſs at the entrance of *Caſtles*, *Cittys*, and *Triumphal intercolumnations* for the more Commodious Ingreſs of *Horſe-Men* arm'd with *Spears*, and *Enſigns*, &c. This *Barbarity* therefore we may look upon as purely *Gothique*, who conſidering nothing with *Reaſon*, have introduc'd it into private Houſes, and been imitated but by too many of our late *Architects* alſo, to the no ſmall Diminution of the reſt which is better Conducted. By *Intercolumnations* I do likewiſe Comprehend all *Terraced* and *Cloiſter'd*-Buildings, *Porticos*, *Galleries*, *Atria's*, &c. as before, contiguous to, or ſtanding out from the Body of *Edifices* in which Caſes they are becommingly proper: And this does naturally lead me to our *Pillars* again, and to conſider the *Spaces* between them.

Intercolumnatio.

Intercolumnation (antiently much the ſame in all the *Orders* without *Arches*, where Spaces may be wider than betwixt ſingle *Columns*) ſignifies the diſtance or void between *Pillar* and *Pillar*, but this not ſufficiently explaining the various Diſtance of the ſeveral Orders in Work, renders it, even in divers of our *Engliſh* Authors where they treat of this *Art*, of ſundry Denominations: For *thus* it was uſually call'd

Inſulata.

Inſulata Columna, where a *Pillar* ſtood alone like an *Iſland* or Rock in the *Sea*, the one inviron'd with *Ayr* as the other with *Water*:

Areoſtylos.

Areoſtylos belonging chiefly to the *Tuſcan Order*, was where the *Intercolumnation* is very wide, as at the entrance of great *Cities*, *Forts*, &c. upon which occaſions at the leaſt four or five Modules (taken for the whole *Diameter*) may be allowed, and commonly requires a Timber *Architrave*. Others almoſt contrary, when they ſtand at only a moderate Diſtance.

Diaſtylos.

Diaſtylos, though ſometimes improperly taken for any *Intercolumnation*, is moſt natural to the *Doric* and may have three or four *Diameters*, nay ſometimes more in the *Ionic*, as fitteſt for *Gates*, *Galleries*, and *Porches* of *Pallaces* or leſſer Buildings, and thence were call'd *Tetraſtylos* and *Hexaſtylos*.

Syſtylos. Pycnoſtylos.

The *Syſtylos* nam'd alſo *Pycnoſtylos* (as much as to ſay *thick of Pillars*, becauſe ſeldom allow'd above a *Module* and an half, though ſome diſtinguiſh the firſt by an half *Module* more for the *Corinthian*) belongs chiefly to the *Compoſita*, and it was us'd before *Temples*, and other Public and Magnificent Works of that Nature: As at preſent in the *Periſtyle* of St. *Peter's* at *Rome*, conſiſting of neere 300 *Columns*; and as yet remain of the Antients, among the late diſcover'd *Ruins* of *Palmyra*. But where in ſuch Structures the *Intercolumnation* did not exceed two *Diameters*, or very little more, (as in the *Corinthian* and eſpecially the *Ionic*) the Proportion of Diſtance was ſo Eſteemed for its Beauty and other Perfections, that it was by a particular Eminence termed *Euſtylos*, as being of all other the moſt Graceful: But it is not now ſo frequent as of old, to be at that vaſt Charge, as the Number and Multitude of *Columns* (which were uſually of one intire Stone exceeding all the other Parts and Ornaments of Building;) would ingage the moſt opulent *Prince*: Whilſt we find thoſe enormous

Euſtylos.

Structures, of *Temples*, *Amphitheaters*, *Naumachia*, *Circus*, *Baths*, *Porches*, *Tribunals*, *Courts*, (and other places of Public Convention) were built and advanced not only by the general Contribution of the People, or out of the *Fiſch* and charge of the State: But very often by the *Munificence* of *Emperors*, who (glorying in nothing more, than in that of Beautifully and adorning of the moſt famous Cities in the ſeveral Provinces) us'd to Imploy *Thouſands* of their *Slaves*, to hew and work in the *Qurrys*, abounding with all ſorts of the richeſt *Marbles*, or with *Serpentins*, *Ophites*, *Porphyris* and ſuch as for hardneſs and difficulty of Poliſhing, our Tools will now hardly enter: And when the *Pillars*, (and *Attire* about them) were finiſh'd, to ſend and beſtow them *Gratis*, towards the Encouragement and Advancement of thoſe Public Works, *&c.* But after this *Conſtantine* the *Great*, meditating the Tranſlation of the *Imperial* Seat, (from the *Weſt* to the *Eaſt*) took another Courſe (tho' by no means ſo Laudable) Cauſing moſt of the moſt Magnificent Buildings to be deprived of their *Columns*, *Statues*, *Inſcriptions*, and Nobleſt Antiquities, to be taken away, and caryed to *Byzantium* (now *Conſtantinople*) to adorn his new *City*, with the *Spoyles* of *Rome*; whilſt what Ruins and Fragments were left, (and had eſcap'd the Savage *Goths* and *Vandals*) were ſtrip'd of all that yet remained of Venerable and Uſeful Antiquity, by the ſucceeding *Pontifs*, for the Building of Stately *Palaces*, *Villas* and *Country-Houſes* of the Up-Start *Nepotiſme*, as are ſtanding both at preſent in the *Citys*, and the Sweeteſt and moſt Delicious Parts of the Country about it; Proud of what yet ſtood of the Miſerable demolition of *Temples*, *Arches*, *Mauſoleas*, &c. So juſtly *Perſtring'd* in that Surcaſme, *Quod non facerunt Barbari, facerunt Barbarini*, and indeed, the ſuperls *Palaces* of *Card. Antonio*, *Panfilio*, &c. Nephews to *Pope Urban* the VIII. and his Succeſſors are Inſtances of this: So as I hardly can tell of any one antient Structure, (not excepting the *Pantheon*) but what has ſuffer'd ſuch ignominious Marks and Diſguiſes; As that the Learned *Author* of the *Parallel*, together with all the Aſſembly of the moſt Skilful *Artiſts*, (which he has brought together) have hardly been able, (with infinite Pains, Charge and Induſtry) to recover the juſt Proportions, and neceſſary *Adjuncts* of the *Antient Orders*: But to return where we left ſpeaking of *Columns*; we are not there obliged to reckon any of them, as meaning different *Orders*, Kinds or *Species* of Building (as in the following Enumeration) but as relating to the ſeveral diſpoſitions of them, agreeable to their *Intercolumnation*. For where the ſides had ranges of *Columns*, as in thoſe large *Xyſtas*, *Temples*, *Porticos*, *Atrias* and *Veſtibula* of the *Greeks* and *Romans* (which were certain Arched or plainly *Architrav'd* Buildings in form of *Cloyſters* and *Galleries*, commonly ſtanding out from the

the reſt of the *Edifice*, and now and then alone, and within alſo) the *Antients* named no fewer than *Seven*; according as they were applied to the ſeveral *Species*, *Diſpoſition* or *Compoſition* of the Fabric; or more plainly, ſuch as were more proper for a *Temple*, according as it was built and plac'd deſignedly for more or fewer Ranks of *Columns*, at the entrance only, on every ſide about it, without or within; not regarding their Proportion or Ornament, which is a different Conſideration (for ſo I think *Vitruvius* may be taken) Of theſe. The Firſt is

1. *Antes*, of which we have already ſpoken.

2. The *Proſtyle*, whoſe Station being at the Front, conſiſted of only four *Columns*.

3. *Amphiproſtyle*, where the Building had a double *Pronaos* or Porch, conſiſted but of four at each.

4. *Periptere*, where the *Columns* range quite about the Building: Six in Front, the *Intercolumnation* two *Diameters* of whatever *Order* it Conſiſt: the Pillars ſtanding downward:

5. *Pſeudodiptere* (Baſtard or Imperfect) as conſiſting of a ſingle Rank only, yet of eight *Columns* in Front at two *Diameters* diſtance; ſo as left ſpace enough for another row from the main Building: Whereas the

6. *Diptere* has a double row of as many quite about, and *Octoſtyle* in Front alſo, at the Diſtance of *Euſtyle*, that is, two *Diameters* and a Quarter; This made as it were a double *Portico*, which we call *Iſles*. Laſtly, the

7. *Hypethre*, conſiſts of two Ranks of *Columns* all about, with Ten at each Face of the Building, and a *Periſtyle* within of ſingle *Columns*; the reſt being expos'd to the Air, that is not walled in, (and placed as the *Pycnoſtyle* cloſer to one another) we have call'd *Periſtyle*, which tho' importing a *Colonade*, or Series of *Columns* ranging quite about; yet are not all which are ſo plac'd to be call'd ſo, unleſs ſtanding *within* the Walls, which is Eſſential to their Denomination; ſince otherwiſe, as well the *Periptere*, as *Monoptere* (both conſiſting but of a ſingle Range or Wing a piece) ſhould then be *Periſtyles*, which they are not: Beſides, the *Monoptere* is only where a *Roof* is ſupported without any Wall or Cloſure whatſoever, as in that Example of *Vitruvius*. Lib. 4. Cap. 7. All which I have only mention'd for the Benefit of our Country *Workmen*, who do frequently, even amongſt our *Engliſh* Tranſlators of *Architectonical* Treatiſes, meet with thoſe hard Names without their Interpretation, when they Diſcourſe of theſe open and Airy *Ornaments*, whether adjoyning to, and ſupporting more *Contignations* and *Stories*; or invironing them, and prominent from them; and becauſe it is for this, that our Maſter *Vitruvius* ſo paſſionately wiſhes that his *Architect* ſhould be (as of old they ſtyl'd *Callimachus*) *Philotechnos*

an induſtrious ſearcher of the *Sciences*, which is the ſame that a good *Philologer* is amongſt our *Literati.*

Moreover inſtead of *Columns* the *Antients* (as now the *Modern* but too often) uſed to place the whole Figures of *Men* and *Women* to ſupport and bear up intire *Cornices*, and even huge Maſſes of Buildings; but of this at large in *Cap.* 22. 23. of the *Parallel.* Part 1. Theſe they alſo nam'd *Telamones* or *Atlas*'s, the *French Conſoles* where they uſually ſet them to ſuſtain the *Architrave*, which for being the next *Member* in order to the *Capitel* we come next to Explain.

Architrave

Epiſtylium

The *Greeks* nam'd that *Epiſtilium*, which we from a mungril Compound of two Languages ἀρχὴ---*Trabs* (as much as to ſay the principal Beam and Summer or rather from *Arcus* and *Trabs*,) call *Architrave*; *Vt velint trabem hanc Arcus vices ſuſtinere qui à Columna ad Columnam ſinuari ſolet*, as *Baldus* with reaſon from its Poſition upon the *Column*, or rather indeed the *Abacus* of the *Capitel.* It is the very firſt Member of that which we call *Entablature* in our Tranſlation of the *Parallel*; and formerly in the *Tuſcan* Order framed for the moſt part of *Timber* in Regard of the diſtant *Intercolumnation*: It is alſo frequently broken into two or three diviſions, call'd by Artiſts

Faſcia.

Faſcias, or rather, plain *Faces*, a little Prominent, the loweſt being ever the narroweſt: Theſe *Breaks* arriving ſometimes to 17, ſometimes to 18 *Minutes* in breadth, ſome rather chooſe to call *Faces* than *Faſcias*, *Swathes*, *Fillets* or *Bands*, by which they are uſually diſtinguiſh'd into *Firſt*, *Second* and *Third*, eſpecially in the three latter *Orders*; for in the *Tuſcan* and *Doric* they do not ſo properly enter, though our *Parallel* yield us two approv'd Examples: Theſe are frequently, and indeed for the moſt part, ſeparated with a ſmall *Aſtragal* cut into *Heads* or ſome ſuch ſlight Carving; the *Faſcias* of the *Architrave* likewiſe curiouſly wrought, as in that wonderful Inſtance of a *Corinthian Entablature* taken out of *Diocleſians* Bathes. *Faſcia*, in the Notion I would rather take it, ſhould be for that narrower *band* about the *Tuſcan* and other *Baſis* as ſome call it; or rather the ſquare Liſt under the ſuperior *Torus* in ſome *Pedeſtals* nam'd *Supercilium*, and not properly the *Torus* it ſelf, as in divers *Engliſh Profiles* they erroniouſly make it; for *Supercilium* ſeems to be a kind of *Corona* or *Drip* to the Subjacent Members. In *Chimneys* the *Architrave* is the *Mantle*; and over the *Antepagmenta* or *Jambs* of *Doors* and *Lintells* of Windows the *Hyperthyron* which the *Italians* call *Soppra frontale*, and our *Carpenters* the *King-piece* immediately under the *Corona* as a large Table to ſupply the *Freeze*, eſpecially in the *Doric* Order, and chiefly over *Portics* and *Doors*; Whilſt as to the preciſe Rule for the *Fillet* of the *Architrave*, the *Tuſcan* Challenges one;

Supercilium.

Antepagmenta.

Hyperthyron.

the *Doric* and *Compoſita* two; the *Corinthian* three; ſometimes interrupted to let in a *Table* for an *Inſcription*.

The uppermoſt *Faſcia* of the *Architrave* for the moſt part is, and indeed always ſhould be (the *Tuſcan* only excepted) adorn'd with

Lyſis. a *Lyſis*, or

Cymatium. *Cymatium* inverted, which is no more than a wrought or plain *O-gee* as our Workmen barbarouſly name it; The term is Κυμάτιον *undula*, and ſignifies a *rouling Wave* to the reſemblance whereof it is moulded. By ſome it is call'd the *Throat*, as from the *Italian* and *French*, *Gola*, *Geule*, or *Doucine*, and of theſe there are *two* kinds, the *Firſt* and Principal hath always its Cavity *above*, and doth conſtantly jett over the *Corona* or *Drip* like a *Wave* ready to fall, and then is properly call'd *Sima*; the *other* has its hollow below, and is *Sima.* nam'd *Inverſa*, the one *Convex* the other *Concave*: The Letters { thus placed do reaſonably well expreſs theſe kind of *Mouldings*, which not only enter into the Member of the *Architrave* where 'tis ever *inverted*, but (as we ſaid) perpetually above the *Corona*, where they do frequently encounter and meet together with a ſmall *Regula* between them, which as it were ſeparate, the parts as the *Frize* from the *Cornice* and the like; but then the neather is the *Lesbyan* ever *reverſed*, and very narrow; though ofttimes both of them Carv'd and Adorn'd with *Foliage*, &c. In the *Doric* Order the upmoſt *Cymatium* of the *Entablature* is ſomewhat different, as conſiſting but of a ſingle hollow only under the Liſt: In the mean time, there is no ſmall nicety among *Architects* about this neceſſary Ornament, both as to the Name and placing; giving to the *Larger* the Name of *Cymatium* revers'd, or *Doucine*; to the *Smaller*, that of *Simus* or Flatnos'd; commonly plac'd beneath the other, under a ſmall *Filet*; yet not ſo eſſentially, but that it has been ſupplied by the *Aſtragal*: However the moſt natural place of the great *Cymatium*, is upon the ſuperior *Cornice* where our *Maſter* gives it the Name of *Epictheates*, and ſhould ever cover the ſloping ſides of *Frontoons* or *Tympanum*.

Cymatium is alſo about the Heads of *Modilions* and conſtitutes part of them, as likewiſe it enters into *Abacus*, and on *Pedeſtals* as in *Stylobatæ Corona*, and the *Baſe* thereof, where we find them both *inverted*; though I remember to have ſeen the upmoſt with the *Recta* alſo in the *Cornice* abovemention'd. But inſtead of *Cymatium* ſeparating the *Architrave* and *Freeze*, *Tænia* oftentimes ſupplies the room,

Tænia. *Tænia* is properly *Diadema*, a *Bandlet* or ſmall *Fillet* with which they uſed to bind the Head; and rather thoſe *Lemniſci* and rubans which we ſee Carv'd and dangling at the ends of *Gyrlands*. The Interpreter of *Hans Bloome* names it the top of a *Pillar*, but very inſolently; it being indeed the ſmall *Faſcia* part of the *Doric Architrave* (or as *Perault*, ſtrictly belonging to the *Cornice* alone) ſometimes

times (but ſeldom) with a narrow *Cymatium*, or *Regula* under it, as *that* runs under the *Triglyphs* as a kind of *Baſe* : Some call it the neather *Tænia* (as *Philander* frequently) to diſtinguiſh it from the *Bandage* which compoſes the *Capitelli* of the *Triglyphs* and continues between them over the *Metops* and not ſeldom under a *Cavetto* or ſmall *Cymatium* with which *Suidas* and other learned *Critics* many times confound it. In a Word, 'tis that in the *Doric Architrave*, which *Cymatium* is in the other Order, and ſeparates the *Epiſtylium* or *Architrave* from the

Freeze.
Zophorus.

Freeze, the Word in *Greek* is Ζωοφόρος, and does genuinely import the imaginary *Circle* of the *Zodiac* depicted with the twelve *Signs*; but by our *Architects* 'tis taken for the *Second* diviſion of the *Entablature* above the *Columns*, being like a Fair and Ample *Table* between the former *Teniæ*, and which though oftentimes plain ſhould be *Pulvinatus* pillow'd, or ſwelling in the *Ionic* Order; but in the *Doric* enrich'd with the *Triglyph* and *Metops* and with a Thouſand *Hiſtorical Symbolic*, *Groteſ.* and other flored Inventions in the reſt of the Orders (*Tuſcan* excepted) eſpecially the *Corinthian* and *Compoſita*, and ſometimes with Inſcriptions. Our term is deriv'd either from the Latin *Phrygio* a Border, or from the *Italian Freggio* which denotes any *Fring'd* or Embroider'd *Belt*: *Philander* ſaies *à Phrygionibus*, not from the *Phryges* a People of the *Minor Aſia* as ſome erroneouſly, but *Phrygiones* a certain *Broidery* or flowr'd *Needle Work*, as one ſhould ſay *Troy-ſtitch* (whence haply our *True-ſtich*) in imitation whereof they wrought *Flowers* and *Compartiments* upon the *Freeze*; which is commonly no broader than the *Architrave*: In the *Ionic* if plain, a fourth Part leſs; if wrought, a fourth larger, of which ſee more where we ſpake of *Ornaments*.

Beſides *this* of the *Entablature*, the *Capitels* of both *Tuſcan* and *Doric* have the *Freeze* likewiſe commonly adorn'd with four *Roſes* and as many ſmaller *Flowers*, for which cauſe 'tis called the *Freeze* of the *Capitel* alſo as we noted, to diſtinguiſh it from the other; likewiſe *Hypotrachelium*, from its poſture between the *Aſtragal* and the *Regula* or *Annulus* of the *Echinus*: This *Tuſcan Freeze* is plain and very ſimple; but in the reſt of the *Orders* it is employed with the *Echinus*, as in the *Ionica*, and the *Capitel Cauliculi* or ſtalkes in the other two; theſe *Roſes* are alſo ſometimes *Inſculped* under the prominent *Horns* or Angles of the *Doric Abacus*.

Triglyphus

The *Triglyphs* which I affirm'd to be charged on the *Doric Freeze*, is a moſt inſeparable Ornament of it. The Word Τρίγλυφος in *Greek* imports a three-Sculptur'd piece, *quaſi tres habens Glyphas*: By their Triangular *Furrows*, or Gutters rather, they ſeem to me as if they were meant to convey the *Guttæ* or Drops which hang a little under them; though there are who fancy them to have been made in imitation of *Apollo's Lyre*, becauſe firſt put in Work (as they affirm) at the *Delphic* Temple: You are to note that the two angular *Hollows* are but half *Chanell'd*, whence they are call'd *Semicanaliculæ*, to diſtinguiſh them from the *Canaliculi* whoſe Flutings are perfect, and make up the *three* with their *Interſtices* or Spaces, being as many flat and ſlender *Shanks* for ſo we may interpret the *Latine Femora*: One of theſe is ever plac'd 'twixt two *Columns*, and ſhould be about the breadth of half its Diameter below: The *Italians* name them *Pianetti* ſmall *Plains*, and ſo do we; and they conſtantly reach the whole *Diameter* of the *Freeze* being crown'd with the formerly mention'd *Capitel*, part of the upper *Tænia*, and determining with the *neather*, where it intercepts them from the Prominent.

Gutta. *Guttæ* or *Drops*. It is certainly the moſt conſpicuous Part of the *Doric Freeze*, ſuppoſed to have been at firſt ſo Carved upon *Boards* only that had been clap'd on the Extremities of the *Cantherii*, *Joiſts* or *Rafters* ends which bore upon the upper *Faſcia* of the *Architrave*, to take off from the Deformity, as alſo were the *Triglyphs*: How indiſpenſably neceſſary they are both to be placed in a juſt and due *Square* from each other, and *Perpendicularly* over their *Columns*, the Author of the *Parallel* has ſhew'd: *Chap.* 2. *Part* 1. as in *that* of the *Temple* of *Solomon* according to *Villalpandus*'s Deſign, how they have been admitted into the *Corinthian Freeze*, but without the *Guttæ*; and ſo in the *Perſique*. Theſe *Guttæ* are as I ſaid thoſe ſix Appendant *Drops* or *Tears* affected only to the *Doric Order*, ſeeming as it were to trickle down and flow from the *Channels* and *Shanks* of the *Triglyphs* through the neather *Tænia*, and ſmall *Reglet* or Moulding under it.

Guttæ are ſometimes made in Shape of Flat *Triangles*, ſometimes ſwelling like the *Section* of a *Cone* or Bell, (but ſquare at the bottom) and therefore ſo call'd by the *French Architects*. They are alſo under the *Planton* and the *Modilions* which ſupport the Cornice, eighteen in Number, exactly over the *Triglyphs*, as in that moſt Conſpicuous elevation of the *Profile* after the ſtately relique at *Albano* near *Rome*, than which nothing can be imagin'd more Noble and Magnificent. *Alberti* calls theſe *Guttæ*, *Clavos*, as conceiving them to be in Reſemblance of *Nails*, but without any Reaſon for his Conjecture.

Metopæ, are the next in Order, and are nothing elſe ſave thoſe Metopæ. empty Spaces in the *Freeze* 'twixt the *Triglyphs* in the *Doric* Order, either *Puræ* and Plain, or *Figur'd*, for that is not neceſſary always, to the great eaſe of *Architects* who oftentimes find it ſo difficult to place them at juſt diſtances; that except in *Church*-Works, they frequently leave them out: The Word is deriv'd of μετὰ and ὀπὴ which is *foramen*, *intervallum inter Sculpturæ cava*, or if you will, *Intertignium*, as importing here rather the forenamed *Spaces*, than what thoſe pretend who will fetch it from the Μέτωπον or forehead of the Beaſts whoſe Sculls (remaining after the *Sacrifices*) were uſually Carved in theſe Intervals; becauſe in theſe Vacuities were the Paſſages for the ends of the *Joyſts*, *Timbers* and *Rafters* which reſted upon the *Architrave*; and were to fill up that Deformity, they uſually made it up with ſome ſuch Ornaments, ſuppoſe of *Skulls*, *Diſhes*, and other Veſſels, nay ſometimes with *Jupiters Squib* or Thunderbolt, *Targets*, *Battle-Axes*, *Roſes*, and ſuch other *Trophies*, as was found moſt appoſite to the occaſion, and not prepoſterouſly filled them (as our Workmen too often do) without any Relation to the Subject; ſo as I have frequently ſeen *Oxes Heads* Carv'd on the *Freeze* of an *Houſe* of *Pleaſure* in a *Garden*, where *Roſes* and *Flowers* would have been more proper. There are ſundry other Ornaments likewiſe belonging to the *Freeze*; ſuch as *Encarpa*, *Feſtoons*, and *Frutages* tyed to the *Horns* of the *Skulls* with *Tæniæ* and Ribbands tenderly flowing about this Member, and ſometimes carried by little *Puti*, Boys, *Cupids* and a Thouſand other Rich Inventions to be found in good Examples: But we are now arriv'd to the *third* and laſt Member of the *Entablature* ſeparated from the *Freeze* by the ſuperior *Tænia*, the *Cornice*.

Coronis.

The *Cornice*, *Coronis*, or as it is collectively taken for its ſeveral and Diſtinct *Mouldings* and *Ornaments*, comprehends a ſmall 1. *Regula*, 2. *Cymatium*, 3. *Dentelli*, 4. *Ovolo* or *Echinus*, 5. *Modilions* or Bedding-mouldings which ſupport the *Corona*, 6. *Sima recta* and *inverſa* (rarely a *Cavetto*) 7. and laſtly another *Regula* which concludes the whole *Order*. We will begin with the *Firſt*, being ſometimes a ſmall *Scotia* conſiſting of an half or quarter round, that now and then alſo both in the *Tuſcan* and *Doric* divides the *Freeze* from the *Cornice* in place of the *Tænia*, as does the *Cymatium* in the reſt of the *Orders*. The

Ovolo.

Ovolo is next in the plainer *Orders*; but it is inrich'd in the *Corinthian* like the *Echinus*, which (if you pleaſe) you may take for the ſame thing in an *Italian* Dreſs, ſome like *Eggs*, ſome like *Hearts* with *Darts* Symbolizing *Love*, &c. In the *Tuſcan* and *Doric* 'tis turn'd like a *Scima* or *Cymatium*, and is ſubſtituted for ſupport of the *Corona*; but in the *laſt* 'tis uſually accompanied with a ſlender *Regula* above it, and in the *Corinthian* both above and beneath, where it is likewiſe frequently Carv'd and adorn'd with a broad *Welt* like a *Plinth*.

Denticulus.

Dentelli, are the *Teeth* (à Member of the *Cornice*) immediately above the *Cymatium* of the *Freeze*, by ſome named alſo *Aſſeri* from their ſquare Form; I ſay in the *Corinthian* and *Ionic*, &c. for in the *Doric Order* they were not antiently admitted, or rather not *Properly*, according to the Opinion of our *Maſter*, though we muſt needs acknowledge to have found them in the moſt Authentical pieces extant:

As for their *Dimenſions* they kept to no certain Rule, but made them ſometimes thicker, ſometimes thinner, ſquare, or long, and more in number; but commonly the *Spaces* leſs by an half, ſometimes by a third part than the *Teeth*, which were themſelves twice as *High* as their *Breadth*, and frequently (eſpecially in the more polite *Orders*) beginning with the *Cone* of a *Pine*, pendent at the very point over the Angular *Column*: *Lomatius* is yet more preciſe in this particular, and gives them as much height as the middle *Faſcia* of the *Architrave*, *Projecture*, equal, (ſomewhat too much) *Front* twice the Breadth of their Height, and a third part leſs than their Breadth for *Vacuity*. The *Dentelli* have oftentimes a ſmall *Regula*, and now and then more than one, as uſually in the *Ionica*, where it has likewiſe an *Ovolo* or *Echinus* for the bedding of the *Corona*; but if inriched, and that *two* of them encounter, *one* ſhould be ſimple and plain, as where it happens to be inſerted beneath it: Next to this ſuperior *Echinus* are the *Modilions*; but inſtead of them *Dentelli* are thought to have been firſt inſtituted, and for that Reaſon ſuperfluouſly joyn'd where *Mutules* are; and therefore where we find *Tænia* under *Modilions* it is not properly divided into *Teeth*, nor is it raſhly to be imitated, though we have ſome great Examples to countenance it. That of the *Pantheon* may ſafely guide us herein, where it is left *Plain* for this very Cauſe, and that the Reaſon of the Thing does not in Truth allow it: However, it muſt be acknowledged, nothing has been more groſely abuſed even amongſt our moſt renown'd *Maſters*.

Modilioni. *Modilions*, being certain ſupports in form of *Corbells*, *Cortouzes* and *Mutules* are a kind of *Bragets* to the *Corona*, and in thoſe *Orders* where they enter, ſupply the part of the *Bedding-moulding* as our Workmen ſtyle the *Ovolo* in this place; for ſo they frequently do in the *Doric* and *Ionic*, but then without any other Ornament than a ſlight *Cymatium* to edge them, and to be always placed over the *Triglyphs*: In the *Corinthian* and *Compoſita* (which is their true place) they are enrich'd with all the delicateneſs and curioſity imaginable (eſpecially in the *Corinthian*) capp'd, as I ſaid, with a curiouſly Carv'd ſmall *Cymatium*, where they are contiguous to the *Planceere* or Roof of the *Corona*. Our ordinary *Workmen* make ſome diſtinction between *Modilions* and thoſe other ſorts of *Bragets* which they call *Cartells* and *Mutules*, uſually Carv'd like the handles of Veſſels Scroul'd, Flower'd, and ſometimes Sculptur'd with the *Triglyph*; and ſuch were the *Ancones* amongſt the *Greeks*: And ſuch are often found ſupporting little *Tables* for *Inſcriptions*; the *Stools* of *Windows*, which jetty out, and Shields, and Compartments for Coats of *Arms*, &c. That there ſhould be no *Guttæ* under *Mutules* (or *Dentelli* under *Modillions*,) is the Opinion of divers learn'd *Architects*, though (as was ſaid) we frequently find them *Chanell'd* like the *Triglyph*, and that in authentick Examples: *Philander* is for it, and pronounces them more proper than even under the pureſt *Triglyph*, for ſignifying (ſays he) *Canteriorum Capita, unde ſtillicidium fieri certum eſt*, drops and Iſicles commonly hanging at the ends of our *Rafters* upon every weeping Shower, whereas *Triglyphi* import only the *Projectures* of the *Beams* and *Timbers* nothing ſo much expoſed: But this I leave to the more Judicious: Whilſt as to their Shape, they ſhould be Square under the *Corona* at double their Breadth the Interval, and juſt over the middle of the *Columns*, how otherwiſe us'd, ſee in *Tympunum, Mutules*.

Mutuli. *Mutules quaſi* μύτιλος (a kind of *Modilions* alſo, or rather the ſame under an *Italian* term) have their Name from their Defect, as being made thinner and more abated below than above, and therefore naturally and diſcreetly deſtin'd to places where they are but little burthen'd with weight, as *here* under that little remainder of the *Cornice*, are to bear up, little *Statues*, *Buſts*, *Vaſas*, &c. and ſo where they are ſet under the *Pedaments* and *Lintels* of *Doors* and *Windows*: Moſt prepoſt'rous therefore and improper is our frequent aſſigning ſuch weak ſupporters to ſuch monſtrous *Jetties* and exceſſive *Superſtructures* as we many times find under *Balconies*, *Bay-Windows* and long *Galleries*; where inſtead of *Mutules* the *Antients* would have plac'd ſome ſtout *Order* of *Columns*: But by theſe unreaſonable *Projectures* (obſcuring the Lights of the Rooms under them) it comes to paſs, that in time our ſtrongeſt Houſes are deſtroyed, and drawn to their irrecoverable Ruin. For the proportion of *Mutules* I commonly find them a Fourth Part higher than their Breadth, their *Intervals* being as wide as *two*; but neither do I find theſe ſo conſtantly regular, only that there be ever one plac'd at the *Corners* and returns of the *Corona*; and then if they interchangeably differ as to the Spaces, and as the *Rafters* direct, there are Examples abundant for their Juſtification: After all, they little differ from *Modilions*, ſave that they are moſt proper to the *Doric Cornice*, repreſenting and covering the ends of the *Rafters*, whereas *Modilion* ſerves for any Order.

Projectura. I ſhall not need to define what is meant by *Projectures*, when I have ſaid it is the ſame our *Engliſh* Authors call the *Sailings* over and Out-*Jettings* of any *Moulding* beyond the upright Wall: The *Italians* name them *Sporti*, the *Greeks Ecphoras*, and for the ſame Reaſon all *Margints* whatſoever which hang over beyond the *Scapus* of a *Column* are *Projectures*; and for a general Rule it ſhould be equal to the breadth of what Projects, relation being diſcreetly had to the height, which beſt determines it.

Corona. *Corona*, is next the laſt conſiderable *Member* remaining of the intire *Entablature*, and (tho' but a part only of the *Cornice*) ſeems indeed to ſet the *Crown* upon the whole Work: I ſay *Conſiderable*, becauſe

Supercilium.

becauſe being regularly plac'd ſo near the uppermoſt *Ovolo*, or *Mutules*, it ſerves to defend all the reſt of the *Edifice* from the *Rain* and injuries of the *Weather*, and therefore has its *Projectures* accordingly; and ſhould be one of the ſtrongeſt Square Members of the *Cornice*: It is ſometimes taken for the intire *Cornix* or *Cornice* with all its Ornaments, but *ſtrictly*, for that part of it above the *Modilions*, *Ovolo*, *Echinus*, or *Ogee* by a turn under the *Planceere*. We find the *Corona* omitted and quite left out of that ſtately *Arco di Leoni*, but it is worthily reproved by our *Author* of the *Parallel*, as being a Member of indiſpenſable uſe. *Corona* is by ſome call'd *Supercilium*, but rather I conceive *Stillicidium* the *Drip* (*Corona elvcolata Vite*) and with more Reaſon, ſo the *French Larmier*, *Gocciolatoio* and *Ventale* by the *Italians* to denote its double Office of protecting both from *Water* and *Wind*: For this reaſon likewiſe have our *Latine* Authors nam'd this broad *Plinth Mentum* a *Chin*; becauſe it carries off the Wet from falling on the reſt of the *Entablature*, as the prominency of that part in Mens *Faces* keeps the ſweat of the Brows, and other liquid diſtillations, from trickling into the *Neck*; and in imitation hereof the Antient *Potters* invented the *brimming* of their *Veſſels*, by turning over ſome of the Ductile Matter when the *Work* was on the *Wheel*. Sometimes there have been two *Corona*'s in a *Cornice*, as in that *Corinthian* Inſtance of the *Rotunda*; and ſo it is frequently uſed in the *Stylobatæ* under *Gula inverſa*; and truly it may be juſtly repeated, as the expoſure and occaſion requires (ſo it be not too near one another) all *Projectures* being but a kind of *Corona* to the Subjacent Members; and therefore their Projectures are accordingly to be aſſign'd, and by no means to be cut and divided to let in *Window*, or *Tables*: *Corona* is alſo taken for the interior and exterior *Curvature* of an *Arch* or Vault.

Planceere.
Cofers.

The under part of the *Roofs* of *Corona*'s (which are commonly wrought hollow, by ſometimes (as we ſaid) making part of the *Cymatium*) are by our *Artiſts* call'd *Planceeres*, and thoſe the *Cofers* wherein are cut the *Roſes*, *Pomgranades*, *Flowers* or *Fretts*, which adorn the *Spaces* betwixt the Heads of the *Modilions* and *Mutules*. This *Ceiling* the *Italians* name *Soffito*, and it ſignifies not only that part of *Corona* which ſallies over, but the *Lacunar*, *Lacus* or Plain of all other *Roofs* made of *Tabulations* and Boards appearing between the *Joyſts*, and which (as now, eſpecially in other Countries) were alſo formerly Gilded, Carv'd and moſt magnificently Emboſs'd with *Fretts* of wonderful *Relievo*; nay ſometimes to the Exceſs of Inlayings with *Ivory*, *Moſaique* and other rich and chargeable Works. *Pliny* l. 35. cap. 11. tells us of one *Pamphilius* the *Maſter* of *Apelles*, to have been the firſt which brought this *Roof-painting* into Vogue: But I refer the Reader who thirſts after more of this, to the Learned *Salmaſius* on *Solinus* p. 1215. Nor is yet the *Corona* perpetually plain as we commonly ſee it; ſometimes (though rarely indeed) I find it *Carv'd* alſo, as in that incomparable *Compoſita* of *Titus*'s Arch, and that of *Diocleſians* Baths in the *Corinthian* Order, and as is indeed every individual member of that intire *Entablature* to the utmoſt exceſs of Art; but how far this may be imitable, conſult the Judicious *Parallel*; while 'tis yet conſiderable that it is *there* but with a kind of *Sulcus* or Channel, in imitation of *Triglyph*, or a ſhort *Fluting* rather, being indeed more proper for the carrying off the *Water*, than any other Work could have been deviſed. *Corona* has over it a ſmall *Regula*, or an inrichment of ſome ſleight *Chaplet* in the *Corinthian*, &c. after which *Cymatium*, as in that of *Titus*'s Arch before rehearſed; ſometimes likewiſe with an *Ovolo* or *Echinus* cut with *Ovals*, and *Darts*, (or as we call them *Eggs* and *Ankers*) as in that Example of *Nero*'s *Frontiſpiece*, and upon this again the double *Cymatium*, whereof the firſt is inverted, and ever the *neathermoſt* and moſt narrow, the other *Recta*, very large and prominent, being now and then adorn'd with *Lyons* Heads plac'd juſt oppoſite to the *Modilions* (of which ſee that curious reſearch of the Learned Dr. *Brown* in his *Vulgar Errors*) though ſometimes they are adorn'd with *Foliage* only. Laſtly, for a final ἐπιθήκη or *Super-impoſition* (if I may be indulg'd ſo to name it) we are now clim'd to the moſt ſupream *Projecture*, and ultimate part of the whole Cornice, namely the

Regula.

Regula, which ſome make a part of the *Sima* or *Gula Recta*, by *Palladeo* the *Intavolato*, and which I think to be the ſole *Member* which I never remember to have ſeen any where *Carv'd*, but always *Plain*, though in ſome of the *Orders* of neer eight *Minutes* in breadth. It is very true, that *Scotia* (which I now and then call *Cavetto* or ſmall hollow) does in ſome laudable Examples ſupport this *Member* inſtead of *Cymatium*, but not ſo frequently; and that the *Tuſcan Cornice* terminates in a *Cymatium* without this *Regula*, or rather in an *Ovolo* as in thoſe Examples after *Sebaſtian Serlio*, &c. but it is not after a true *Guſto*, and the Fancy is particular. *Regula*, call'd alſo *Liſtello*, *Cincta*, &c. (of which ſomething already hath been ſpoken) is always that *Supercilium* or ſuperior Member of the *Cornice*, though it be likewiſe taken for that which is by ſome call'd *Quadra*, being thoſe two Liſts commonly including *Scotia*, as we find it in the *Ionic Spira* both above and beneath: Sometimes alſo it ſignifies the *Rings* or ſmall *Feruls* begirting the *Scapus* of a *Column* near the *Apophyges*, or the *Plinth* of a *Pedeſtal*: Therefore I diſtinguiſh them, though yet they may be accounted the ſame, ſeeing they uſually import any ſmall plain *Fillet* dividing greater Members; for ſo *Philander* calls almoſt all ſimple parts broader or narrower, which like *Fillets* encompaſs the reſt; or rather as *Sycis*, ſeparates the Members from contiguity, both for variety and diſtinction,

ion, as in the *Doric-Trabeation*, *Regula*, *Sima*, *Cymatium*, &c. In the *Capitel*, *Regula*, *Cymatium*, *Plinthus*: In the *Cornice* of the *Stylobata* alſo *Regula*, *Cymatium*, *Aſtragalus*: But where it is no leſs conſpicuous, is in that part of the *Triglyph*, which jetts out under the *Tænia*, and from which the *Guttæ* depend, where it ſeems to be a part of the very *Architrave* it ſelf. Laſtly, before I altogether leave the *Cornice* (which is indeed the top of all, and may be call'd the *Crown* of the *Corona* it ſelf) it may not be amiſs to add this ſhort Note, for *Joyners* and ſuch as make *Cornices* of *Wainſcot*, or *Fret-Work*, concerning the *Projectures*, which having relation to the Height, an Inch allow'd to every Foot ſuffice for a room of 15 Foot pitch, which is one Foot three Inches, where there is *Freeze* and *Cornice*, if much higher, and that there be the whole *Entablature*, each ſhall require a tenth part. To conclude, the very meaneſt Building, *Farm*, or *Out-houſe* deſerves a Moulding, *Cornice* with a *quarter round* or *Ovolo*, a *Cymatium* and *Fillet*.

Trabeatio. And may thus much ſuffice to have been ſpoken of the *Cornice* or upper *Member* of the *Trabeation*, which we mean by the *Entablature*, for both theſe terms ſignifie but one and the ſame thing, *viz.* The *Architrave*, *Freeze*, and *Cornice*: which I therefore the more preciſely note, becauſe ſome Writers apply it only to the very cover and upmoſt top of the *Orders*; but ſo does not our Country-man *John Shute*, whoſe Book being Printed *Anno* 1584. (and one of the firſt that was publiſhed of *Architecture* in the *Engliſh* Tongue) keeps rather to the Antient *Terms* than by mixing them with ſuch *barbarous* ones as were afterwards introduc'd, indanger the Confuſion of Young *Students* and ſuch as applied themſelves to the Art. Finally, to reform another miſtake, I think good to note that where we find *Coronix* in our Authors, it is rather meant for all that *Moulding* projecting over the *Dye* or ſquare of the *Pedeſtal* (by ſome call'd alſo *Cima*) *Cima.* then this concluſive Superior Member of the *Entablature* which we name the *Cornice*: But I have done, nor needs there more be added for the perfect Intelligence of the moſt Minute *Member* and *Ornament* mentioned in this *Parallel*, or I conceive in any other *Author* whatſoever treating concerning this *Art*, and naturally applicable to the *Order*, by which we are all along to underſtand certain *Rules* and Members agreed on for the proportions and differences of *Columns*, the *Characters*, *Figures* and *Ornaments* belonging to every *Ordo.* Part and Member; whither bigger or leſſer, plain or inrich'd: Or as others, a Regular Arangement of the principal, and conſtituent Parts of a *Column*, from whence there Reſults that Compoſition which gives it uſefulneſs with Grace and Beauty: This for conſiſting then of the ſeveral *Shapes* and *Meaſures*, obliges us to ſay ſomething more of *Proportion*, as being indeed the very Foundation of *Architecture* it ſelf; riſing as we ſhew, from the Repreſentation of

Natural Things: Nor is it in this *Art* only applicable to the *Diſpoſitions* and *Kinds* of thoſe Edifices (which we have already ſpoken of) but to every individual *Member* of an *Order*, which *Vitruvius* will have taken from the Regular Dimenſions and Proportions of the parts of the *Humane Body*, in relation to any one moderate Meaſure of the ſame Body, differently multiplied in ſeveral Parts: As for Inſtance, the *Head* for an *Eighth* part of the whole; *Twice* from the point of one *Shoulder* to the other extream, *&c.* *Thrice* in the *Arm*; four times from the *Hip* downwards, *&c.* or as *Albert Durer*, by Multiplying the *Face* from the bottom of the *Chin*, to the upper part of the *Forehead*, reckons the whole length to be ten *Et ſic de cæteris*; according to which the *Diameter* of a *Column* ſhall be ten times in the height of the *Corinthian*; the *Intercolumnation Euſtyle*, two and a quarter, *&c.* of which let the curious conſult our Maſter learned Interpreter, *lib.* 3d. *cap.* 1. where he Diſcourſes of *Poſitive* and Unalterable Eſtabliſhments; whilſt that which we mean by *Proportion* here, is the *Scale* by which all the *Parts* are Regulated as to their juſt *Meaſures* and Projectures; and this has by *Artiſts* been call'd the

Modulus.

Modul, or as *Vitruvius* (and ſome will have it) *Ordonation*; explained by *Modica commoditas*, to be taken for the *Parts* or *Quantities* by which the ſeveral Members of an *Order* are Calculated and Adjuſted in their Compoſition. In the mean time to avoid all uncertainties and Perplexity of *Meaſures* differing in moſt Countries; ſome dividing into more, others into fewer Parts, to the great eaſe of both *Architects* and Workmen; by * *Moduls* is to be underſtood the *Diameter* or *Semidiameter* of a *Column* of whatever *Order*, taken from the Riſe of the *Shaft* or Superior Member of the *Baſe*, namely, at the thickeſt, and moſt Inferior Part of the *Cylinder*, from whence *Monſieur de Chambray* (following *Palladio* and *Scamozzi*) taking the *Semidiameter* divided into 30 equal Parts or *Minutes*, make it to be the *Univerſal Scale*: Now tho' *Architects* generally meaſure by the *whole* Diameter (excepting only in the *Doric*, which they reckon by the *half*) it makes no alteration here, ſo as the Workman may take which he pleaſes; We proceed next to the *Orders* themſelves: Nor let it be thought a needleſs Repetition, if having given the Learner (for to ſuch I only ſpeak) ſo Minute and full a Deſcription of all thoſe Parts and Members whereof the ſeveral *Orders* are compoſ'd and diſtinguiſh'd; I go on to ſhew how they are put together in Work, by what they have in common, or peculiar to denominate the *Species*, and bring the hitherto ſcattered and diſperſed Limbs into their Reſpective Bodys.

* *Note that to diſtinguiſh it from* Modell, *by which is ſignified the* Type *(or Geometrical repreſentation of a Building) this is to be read with the fifth Vowel, that by the Second.*

We have already ſhew'd (ſpeaking of *Capitels*) that a *Column*, which is ſtrictly the Naked *Poſt* or *Cylinder* only; does not aſſume the Name and Dignity of any *Order*, till compleatly qualified with thoſe

Parts and Acceſſaries, which give it *Name Praeminence* and Rank; but being ſo diſtinguiſh'd, they are to *Architects* what the ſeveral *Modes* are in *Muſic*, and the *Carminum genere* among the *Poets*: All *Buildings* whatſoever coming properly under the Regiment of ſome one or other of them, or at leaſt, ought to do, and they are *Five*, (according to the Vulgar Account) namely, *Tuſcan*, *Doric*, *Ionic*, *Corinthian* and *Compoſita*: But ſince the *Firſt* and *Laſt* of theſe are not admitted by our great *Maſters*, as *Legitimat Orders* (to which indeed the Antient *Greeks* claim only Title) we might with *Vitruvius*, and our Author of the *Parallel*, leave them to bring up the Rear; did not *Cuſtom* as we ſaid, and common uſe ſufficiently Juſtify our aſſigning this place for the

Tuſcan, Ruſtic, or by whatever name dignified, or diſgrac'd; Tuſcan. for being ſeldom found in the Antient Fabrics of the *Romans* themſelves, by which name it is alſo call'd; it ſeems yet to Challenge ſome regard from its reſemblance to thoſe plain and ſimple Rudiments of thoſe primitive Buildings, where they laid a *Beam* on the top of two forked *Poſts*, newly cut and brought out of the Foreſt, to ſupport that which gave Covering and Shade to the firſt *Architects*, ſuch as they were, and we have deſcrib'd; till Time and Experience, which Mature and Perfect all things, brought it into better Form and Shape; when the *Aſiatic*, *Lydians*, who are ſaid firſt to have Peopl'd *Italy*, brought it into that part of it, call'd *Tuſcany*: Nor let it altogether be deſpis'd, becauſe of its Native plaineſs, which rarely admits it into Buildings, where Ornament is expected; ſince beſides its ſtrength and ſufficiency (which might commute for its want of other Beauty, and give place at the Ports and Entrances of great Cities, Munitions, Magazines, Amphitheatres, Bridges, Priſons, &c. that require Strength and Solidity) we find it capable alſo of ſuch Illuſtrious and Majeſtic Decorations, as may Challenge all the Grecian *Orders* to ſhew any thing approaching it, ſo long as thoſe three Famous *Columns*, thoſe of *Trajan*, and *Antoninus*'s at *Rome*, and a third of *Theodoſius*'s at *Conſtantinople* ſtand yet Triumphant, and braving ſo many Thouſands of the other *Orders*, which lie Proſtrate, buried in their Duſt and Ruins. Nor is this the firſt Example (as ſome pretend) as appears by that Antient *Pillar* erected to *Valerius Maximus*, Sirnam'd *Corvinus*; on which was plac'd a *Raven*, in Memory of what happen'd in the Famous Duel between that *Hero* and the Gygantic *Gaule*: Thus whilſt the reſt of the *Orders* are aſſiſted to ſupport their Charge and heavy Burdens by their Fellows, and a Conjugation of Entablature, (not allow'd to this) the *Tuſcan* ſtands alone like an *Iſland*, ſteady and as immoveable as a Rock.

This *Column* with its *Baſe* and *Capitel*, is in Length *Seven Diameters*, taken at the thickeſt part of the *Shaft* below; the *Pedeſtal* one; the *Baſe* one *Module* or half Diameter, which divided into *Two* equal Parts, *one* ſhall be the *Plinth*, the other for the *Torus* and *Cincture*, which being but a fourth part of the bredth in this *Order* only, makes a part of the *Baſe* (peculiar to it ſelf alone) as in the other it does of the Shaft it ſelf.

The *Capitel* is one *Modul*, which divided into three equal Parts, one ſhall be for the *Abacus*, the other the *Ovolo*, the *Third* parted into *Seven*, whereof one is the *Liſt*, and the remaining *Six* for the *Column*: The lower *Aſtragal* is double the height of the *Liſt* under the *Ovolo*: Note, That *Vitruvius* makes no difference 'twixt the *Capitel* of this *Order* from the *Doric*, as to Proportions, tho' Artiſts diſpute it; who (as was ſaid) allow it a Semidiameter.

Now, tho' they have not granted it any fixt and certain *Entablature*, but choſen what they thought fit out of other *Orders*; yet they ſeldom give it leſs than a Fourth Part of the height of the *Shaft*, like the *Doric*, which commonly, and very properly, ſupplies the Place of the *Tuſcan*, and that with a great deal of more Grace, where they ſtand in Conſort, as in *Arches*, and the like: The diſtance or *Intercolumnation* of this *Order*, ſometimes amounting to four Diameters, ſometimes requires an *Architrave* of Timber; or if of Stone to be plac'd much nearer, unleſs (as we ſaid) in Vaulting and underground Work, to which ſome almoſt wholy Condemn it.

Doric.

The *Doric*, ſo nam'd from *Dorus* King of *Achaſis*, reported to have been the firſt who at *Argos* built, and dedicated a Temple to *Juno* of this *Order*, is eſteem'd one of the moſt Noble, as well as the firſt of the *Greeks*, for its Maſculine, and as *Scamozzi* calls it, *Herculean* Aſpect, not for its Height and Stature, but its Excellent Proportion, which fits it in all Reſpects, and with Advantage, for any Work wherein the *Tuſcan* is made uſe of, and renders that *Column* (among the Learned) a Supernumerary, as well as the *Compoſita*.

The *Doric*, *Baſe* and *Capitel*, challenges Eight *Diameters* ſet alone; but not ſo many by *One*, in *Porticos* and Mural Work.

The *Capitel* one *Modul*, with its *Abacus*, *Ovolo*, *Annulets*, *Hypotrachelium*, *Aſtragal* and *Liſt* beneath the *Capitel*, making a part of the Shaft or *Column*:

The *Entablature* being more ſubſtantial than in the reſt of the *Greek Orders*, requires a *Fourth* Part of the Height of the *Columns*; whereas the others have commonly but a *Fifth*.

The *Architrave* one Module, compos'd but of a ſingle *Faſcia*, as beſt approv'd, (tho' the Modern ſometimes add a Second) with a *Tænia* or Band which Crowns it.

The *Freeze* with its *Liſt*, which ſeparates it from the *Cornice*, is 1 Modl. $\frac{1}{4}$. The *Cornice* holds the ſame Proportion, with this Note, That when the *Column* is above 7 *Diameters*, both *Freeze* and *Architrave* have their Regulated Meaſure, one being of a ſingle *Module*, the other being *Three Quarters*, and the remainder being a fourth Part of the *Column* is caſt into the *Cornice*.

This *Order* had of Old no *Pedeſtal* at all, and indeed ſtands handſomely without it, but where it is us'd, *Palladio* allows it Two *Diameters* and a third of the *Column*, and is often plac'd upon the *Attic-Baſe*; for antiently it had none: We find it ſometimes *Fluted* with a ſhort Edge without *Interſtice*, as there is in other *Orders*; But that which is indeed the proper and genuine *Character* of the *Doric*, is (with very moderate Inrichment beſides) the *Triglyph* and *Metop* in the *Freeze*, with *Guttæ* in the *Architrave* beneath; the due Collocation and placing of which, often ſubjects our *Architects* to more difficulty, than any other Acceſſary in the other *Orders*; becauſe of the *Intercolumnation*, which obliges them to leave ſuch a ſpace 'twixt two *Columns*, as may not be leſs than for one *Triglyph* to five, counting what falls juſt on the Head of the *Columns*; which if plac'd at the entrance of a Building, the diſtance muſt be for *Three*; which to adjuſt is not very eaſy; ſeeing the *Intercolumnation* ought to correſpond with the diſtance of the Spaces of the *Triglyphs* and *Metops*; which point of Criticiſme, is the Cauſe we often find them quite left out in this *Order*, which ſuits ſo well in the *Pycnoſtyle* and *Acroſtyle*.

Jonica. The *Jonic*, invented, or introduc'd by *Jon*, ſent by thoſe of *Athens* with a *Colonie* into that part of *Greece* bearing his Name, (and where he erected a Temple to *Diana*) conſiſts of proportions between the ſolid and manly *Doric*; the delicate and more Feminine *Corinthian*; from which it but little differs, ſave in the Matron-like *Capitel*: It contains Eighteen *Modules* or Nine *Diameters* (tho' by one leſs at firſt) together with the *Capitel* and *Baſe*, which laſt was added to give it Stature.

The *Entablature* is allowed a Fifth part of the height of the *Column* of which the *Baſe* takes one *Module*, (with ſometimes a ſmall Moulding of Twenty *Minutes*) the *Capitel* very little exceeding a Third: But its diſtinguiſhing *Characteriſtic* is the *Voluta*; concerning which ſundry Architects have recommended their peculiar Methods, for the Tracing and Turning that Ornament; eſpecially *Vignola* and *Goldman*: The Famous *Mich. Angelo* had one after his own Mode, and ſo others; but that which has been chiefly follow'd, is what *Philip de L'Orme* contends to be of his own Invention.

This *Column* is *Fluted* with Four and Twenty Plaits; the Spaces or *Interſtices* not ſharp and edg'd like the *Doric*, (which is allowed but Twenty) tho' of the ſame depth, and hollow to about a Third Part downward, where they are convexly *ſtav'd*, and thence nam'd *Radiant*, by ſome *Rudent*, tho' of old we find them *Fluted* the whole length: Thus as the *Capitel* reſembl'd the modeſt *Treſſes* of a Matron; ſo did the *Fluting*, the Folds and Plaits of their Garments.

The *Pedeſtal* is of two *Diameters* and as many Thirds: Several other Obſervations pretend to this *Order*, to render it Elegant, which are left to the curious, but theſe are the more Eſſential.

Corinthian.

The *Corinthian* had her Birth from that Luxurious City; trick'd up and adorn'd like the Wanton Sex, and is the Pride and Top of all the other *Orders*: For the reſt it agrees with the Proportion of the *Jonic*, excepting only in the *Capitel*: In a Word, it takes with its *Baſe Nine Diameters* and three Quarters, and ſometimes *Ten*: If *Fluted*, with as many as the *Jonic*, half as deep as large; the *Liſtel* or Space between the *Groves*, a Third of the depth; yet not ſo preciſely, but that according to the Compaſs and Station of the *Column*, the Flutes may be Augmented to Thirty and above.

Our Modern *Architects* for the moſt part, allow but one *Fifth* of the Height of this *Column* to the *Entablature*, comprehending *Baſe* and *Capitel*; I ſay for the moſt part; but in the nobleſt, and moſt intire Examples of Antiquity, which is that of the Roman *Pantheon*. The *Entablature* is indeed ſomewhat deeper; but with this Circumſpection to be Imitated, that the Fabric to which it is applied, be Great and Magnificent, as that Famous Temple is, and which will depend on the Judgment of the *Architect*.

The *Capitel* is of one *Diameter* or two *Modules* in height; the *Abacus a Sixth* or Seventh Part of the *Diameter* taken at the bigger End of the *Column*, which is univerſally to be underſtood in the Meaſure of all the *Orders*: The reſt ſhall be divided into *Three* equal Parts; *One* for the Firſt Border or *Toure* of Leaves; the other for a *Second*; the Third Part divided in *Two*, and of that which is next the *Abacus*, the *Volutas* are form'd of the other the *Cauliculi*: The *Bell* or *Furſt* under the Leaves, reſembling *Callimachus*'s *Basket* under which they are Carv'd; fall exactly with the Hollow of the *Flutings*: In the mean time, there is no ſmall inquiry about the *Foliage*, of what ſpecies of *Thiſtle* the Antients form'd; this Florid Ornament; which is generally attributed to the *Branchæ Vrſinæ*; but of a tender, more Indented and Flexible kind, than the wild and prickly, which we ſee us'd in the *Gothic* Buildings; whilſt the *Compoſita Capitels* ſtuck it with *Laurel* and *Olive* Leaves, emerging out of the Veſſel, with the *Voluta* above the *Echinus*, and as *Palladio* would have it (eſpecially of the *Olive*) the Sprigs plac'd from five to five like the Fingers of ones Hand, as becoming it better than *Four*, and commends ſome *Capitels* he had ſeen whoſe *Cauliculi* were fac'd with *Oaken* Leaves;

Note, that the Scrolls ſeeming to be form'd out of the *Cauliculi*, the *Roſes* in the middle of the *Abacus*, was ſometimes by the Antients of the ſame bredth, which ſince they make to bend on the middle *Voluta.*

The *Baſe* of this *Order* is Fifteen *Minutes* of a *Module*: The *Pedeſtal* requires a *Fourth* Part of the Height of the *Columns*, and ſhall be divided into *Eight* Parts: *One* to the *Cymatium*; *two* for the *Baſe* (which is the *Attic*) the reſt for the *Zoccole* or *Die*: And thus do the *Three Greek Orders* repreſent thoſe *Three* Species of Building; The *Solid*, the *Modeſt-Mean*, and the *Delicate*, between the *ſimple plain*, the *Gay* and *Wanton*, which are the *Latine* Extreames; whilſt the *Gothic* is riſſen from the Corruption of them all: For after all, there's none has been more groſſly abuſed, than this Flouriſhing and Noble *Order*, by ſuch as with their Impertinence, have ſometimes rendred it neither *Corinthian* nor *Compoſita*, which is the Fifth and Laſt.

Compoſita.

The *Compoſita*, being the *Junior* of all the reſt, and Forreigner to the *Greek*, is of a *Roman* Extraction, and therefore by ſome call'd *Italian*; and tho' not without ſufficient Inſolence, taking place of the *Corinthian*, between whom and the *Jonic* ſhe's but a Spawn and Mungrell, as well as the *Tuſcan*, and ſo reckoned among Judicious *Architects*, and by our *Maſter* himſelf, not ſo much as own'd an *Order*, as not thinking it poſſible to invent a more Noble and Compleat, than the *Corinthian*: They would fain it ſeems, have one to bear the Countries Name, and that as they Inſulted over and brav'd the reſt of the *World*, ſhould ſit Triumphant over the reſt of the *Orders*, from whom they have pluck'd their Fine and Gawdy Plumage; priding it over the *Corinthian*, from whom and the *Jonic*, ſhe only differs one *Diameter* more in height:

The *Capitels* four Angular *Scrolls*, take up all that ſpace, which in the *Corinthian* is partly fill'd with the *Cauliculi* and Stalks, and now and then an *Eagle*, *Griffon* is found to neſtle among the Foliage, of which it has a Series of two rows, and under the *Ovolo* the *Jonic* Neck-Lace; whilſt others affirm, that the variety of the *Capitel* changes not the *Species*, which conſiſts (as *Perault* will have it) in the Length of the *Shaft* only; ſo as no body is to wonder at the prodigious Licentiouſneſs, which ſome we find have run into, to gratify their Ambition. The *French* (of all the Nations under *Heaven*, being the fondeſt of their own Inventions, how Extravagant ſoever, and to Impoſe them on all the World beſide) call it, Forſooth, the *Gallic Order*, and with a Confidence peculiar to themſelves, to alter and change what for almoſt Two Thouſand Years, none has been ſo bold to Attempt with that Exhorbitance: For they have Garniſh'd this *Capitel* with *Cocks-Feathers* and *Cocks-Combs* too among the *Flowrdeluces*, ridiculouſly enough; hanging the

Leaves and Stalks about with the *Chains* and *Ribbons* of the *Orders* of the St. *Eſprit* and St. *Michael*, with its dangling *Cockle-Shells*; in imitation doubtleſs of *Xerxes*'s tying the *Scarfs* and *Garters* of his *Concubine* and *Miſſes*, among the Boughs of the Famous *Platan*; whilſt one would think we might be content, with what the *Romans* have already ſet for a Pattern on thoſe antient *Columns* of this *Order*; as I am ſure the Judicious Author of the *Parallel* would have been, who contrary to the *Genius* of his Country-Men, had the greateſt Averſion to the leaſt Innovation in this Profeſſion; what (as we ſaid) the *Romans* have left us being abundantly more Graceful, and rather in Exceſs: Wherefore by another nice diſtinction, this learn'd *Commentator* calls *that* the *Compoſita*, which keeps to its fix'd *Rules* and ſtated *Proportions*; and that which others every Day Invent, the *De Compoſit*, or as his term is, *Compo-Compoſit* and ſo ſets it up for a *Sixth Order*. But to proceed.

The *Entablature* has by ſome been allow'd a Fourth Part of the *Column*, but by *Palladio* only five, as to the *Corinthian*.

The *Baſe* is as the *Attic*, or a Compound of it and the *Jonic*. The *Pedeſtal* has a Third of the Height of the Shaft: Not but that any of theſe Proportions ſo eſtabliſh'd (as ſometimes, and upon juſt Occaſion) may be Varied according to the Quality and Grandure of the Building, as to the Inlarging or Diminiſhing of a Member, if the Judicious *Architect* ſee Cauſe, and to be more Graceful, which is a good Rule in all ſuch Caſes in the other *Orders*, and for which *Vitruvius* gives excellent Precepts, as he likewiſe does to their number and placing in ſingle or double Ranks, with their different Application, as whether cloſe to the Wall, or to the *Angle* and Extremes, where if *Inſulat* and without touching, more thickneſs is allowable; ſince being ſurrounded by the *Air* only, it is made appear ſo much the Slenderer, as that ſome which have been found but of ſeven *Diameters* only, have become their Stations better than if they had held their intire Dimenſions. There now remains the

Caryatides, of which, and of the *Perſian*, we have an ample Account in the *Parallel* out of *Vitruvius*, introduc'd as a Mark of Triumph over the *Caryans* of *Peloponeſus*; whom the *Greeks* having vanquiſh'd with their Confederates, they caus'd the Images and Reſemblances of both Sexes and Nations (as Slaves, *Atlantes*, and *Talamones*) to be plac'd and ſtand under Maſſie Weight and Superſtructure inſtead of *Columns*: The *Women* to ſignifie thoſe of *Carya*, whom they only ſpared; and the *Men*, as Captive *Perſians*, which gave Denomination to the *Order*, if at leaſt they may be call'd ſo for diſtinction ſake only; ſince they differ in nothing either of Height, Subſtance, or *Entablament* from the Feminine *Jonic*, and Maſculine *Doric*: But how, or where they had originally been *Caryatides*.

employed in any remarkable Building, is not ſo perſpicuous, from any Antient *Veſtigia* at preſent remaining; but as they ſeem moſt properly to be plac'd at Entrances, and before *Arches* and *Porticos* inſtead of *Pillaſters*; ſo doubtleſs they gave occaſion to many *Gothic* Abſurdities, and Extravagant Poſtures of *Men*, *Monkys*, *Satyrs*, &c. for the bearing up of *Cornices*, in place of *Mutuls*, and *Cartouſes*, to that ſhameful Impudence, as we ſee them not ſeldom in our very Churches.

There remaine yet of *Columns* divers other Sorts (to mention only the *Duilian*, *Roſtral*, *Mural*, *Obſidional*, *Funebral*, *Aſtronomial*, and other Symbolical Monuments, which may upon ſome particular occaſions have their Places,) but no more that can honeſtly derive a Legitimate Pedegree: For ſome are *Wreath'd*, others *Spiral* and the like: But as we meet them not in any approved Author, or Antient Fabric; ſo are they very ſparingly to be made uſe of, if at all: Indeed the Famous Architect, *Cavalier Bernini*, has caſt a Set of theſe *Torſed Columns* of a vaſt height; twiſted about again with Branches, among which are *Puti*, little *Angels*, Pope *Urbans Bees*, and other imboſſed Sculptures, all of Gilded *Copper*, to ſuſtain the *Baldacchino* or ſacred Canopy over the high *Altar* under the Cupola at St. *Peter's*, which are exceedingly Magnificent: But it does not always ſucceed ſo well where it is practic'd: 'Tis yet reported that there was an Antient *Wreath'd Column* found ſomewhere, wound about with a *Serpent*, (as *Painters* repreſent the Tree in *Paradiſe*) taking nothing away from the ſtraightneſs of the Shaft; for ſo the Antients prefer'd the Solid and Subſtantial in all their Works, admitting nothing to bear any weight that ſhould ſeem in the leaſt to plie, yield or ſhrink under it, as thoſe ſorts of *Columns* appear to do: But as the great *Maſters*, and ſuch as *Mich. Angelo*, &c. Invented certain new *Corbells*, *Scrolls* and *Modilions*, which were brought into uſe; ſo their Followers, animated by their Example (but with much leſs Judgment) have preſum'd to Introduce ſundry Baubles and trifling decorations (as they Fancy) in their Works; Ambitious of being thought *Inventors*, to the great Reproach of this noble Study; ſo dangerous a thing it is to Innovate either in Art or Government, when once the *Laws* and *Rules* are prudently ſettl'd and Eſtabliſh'd, without great conſideration and neceſſity: And therefore, tho' ſuch Devices and Inventions, may ſeem pretty in *Cabinet-Work*, *Tables*, *Frames* and other *Joyners*-Work, for variety, to place China-Diſhes upon; one would by no means, encourage, or admit them in Great and Noble Buildings. Laſtly,

As to the *Placing* of the *Orders* and Stations of *Columns* in Work; the ſimpleſt, ſtrongeſt, and moſt ſubſtantial, are ever to be aſſign'd to ſupport the Weaker. The *Romans* indeed ſometimes ſet the *Compoſita*

poſita above the *Corinthian*; but 'twas not approv'd of by the Judicious, nor in truth ſhould they appear *together* in the ſame Building: Generally then, the *Rule* is this, to place the Higheſt and Richeſt *Order* over the more Solid and Plain; eſpecially, where they are to decore the *Face* and *Fronts* of Buildings, conſiſting of two or three Stages: But whether at all, or not; their *Proportions* ſhould be chang'd or abated, is nicely diſputed by our *Architects*, of which ſee *Monſieur Perault* on *Vitruvius*, *Lib.* VII. *Cap.* 7. ſpeaking of *Scenes*; Concluding, that it ought to be done very ſparingly, and with great Conſideration: In the mean time, *Columns* plac'd over *Arches*, produce this Inconvenience, that the *Arches* of any of the five *Orders*, if well proportion'd (ſuppoſe for Inſtance, *Doric*) it will become defective, in the *Jonic* and *Corinthian*, by Reaſon of the *Intercolumnation*; the Diſtance hindring their Collocation ſo exactly over one another, as become them. There is after all, a *Leſſer* ſort of *Column*, than any we have ſpoken of, which now and then we find plac'd over a much *Greater*, next the *Roof*, or rather a kind of *Pilaſter* after the *Attic* Mode: To Conclude.

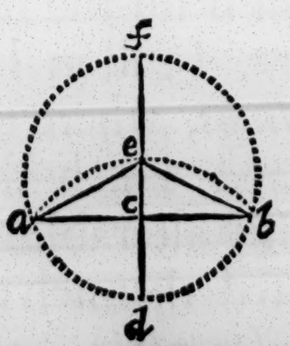
The Poſition of double *Columns*, upon the ſame *Pedeſtal*, I find quite condemned by *M. Blondel* as intollerable, accounting it *Licentious* ever among the *Antients*; which (as great *Artiſts* do not always agree) *Monſieur Perault* as learnedly defends, and vindicates; and that one is not ſo preciſely oblig'd to Rules, and Examples; but that in ſome Caſes, they may ſafely be departed from for the better; ſince it were to put a ſtop to the Improvements of all *Arts* and *Inventions* whatſoever, none of which were comſummately perfect at the firſt; beſides, that there is nothing *Poſitive* in the Caſe: However, as to this particular, the *Antients* did frequently uſe to Joyne *Columns*, two and two very near to one another upon the ſame *Pedeſtal*, leaving a diſtance of two *Intercolumnations* in *One*; which tho' *Perault* holds to be a little *Gothic* and much affected by his Country-Men the *French* (as they do all Novelties) ſo they would have it paſs for a peculiar manner of *Diſpoſition*: The *Pſeudoſtyle* is yet we find made uſe of by great *Architects*, and therefore to be referr'd to able Judges.

Notwithſtanding, inaſmuch as there do yet happen ſome *Superſtructures* which both in *Works* and *Books* of this Magnificent *Science* have likewiſe *Names* of doubtful ſignification, and to ſatisfie all that may be farther deſir'd for the rendering of this undertaking more uſeful and inſtructive, I will in brief proceed to what is uſed to appear further in *Buildings*, where they did not flatten the *Roofs* and Cover of *Edifices*, and which tho' certainly of all other the moſt Graceful; is of neceſſity alterable according to the Climate.

Thoſe *Roofs* which exalted themſelves above the *Cornices* had uſually in *Face* a *Triangular plain* or *Gabel* within the Mouldings (that when our Workmen make not ſo Acute and pointed they call a *Pedament*) which the *Antients* nam'd

Tympanum

Tympanum, but this is to be taken now and then for the whole *Frontiſpiece* from the *Cornice* to the upmoſt part of the *Faſtigium* or ſuperior Angle of it, and is commonly circumſcrib'd with the ſame *Cornice* that the ſubjacent *Order* is of. It is properly plac'd at the *Front* and *Entrance*, and over the *Porches*, *Windows*, *Niches*, *&c.* to protect them from the Injuries of the Weather; and therefore very impertinently *Broken*, or Flatted by ſome, which expoſes all that is under, to many Inconveniences, nor ſhould it be at all allow'd ſave where an abſolute neceſſity of ſetting in ſight (not otherwiſe to be had) pleads for it: Now tho' they are commonly made *Triangular*, we frequently find them *Semi-Circular* (or of ſome other Section) whereof the *Baſe* is the *Diameter*: Some again have a double *Tympanum*, as in that *Tuſcan* Example deſcrib'd by *Perault*, *Vitr.* l. 3. where the ſtanding out of the *Porch* from the reſt of the main Wall of a *Temple* of that *Order*, requires it; I ſay before a *Temple*; ſince they were never made in the Fronts of any other Buildings; the Antients Dwelling-Houſes being generally flat at the Top, *Julius Cæſar* being the firſt whom they Indulg'd to raiſe his Palace in this *Faſtigious* manner: As *Salmaſius* tells us in *Solin*: I need not add, that the *Die* of a *Pedeſtal*, and other flat and naked Parts in out-ſide Work and Pannels of *Wainſcot* is ſometimes call'd *Tympana*; ſince it may be to better purpoſe, to give ſome Directions about the Proportion and Acceſſaries belonging to it; it being much diſputed; *Vitruvius* allowing neither of *Dentelli*, or *Modilion*, but a ſimple *Cornice* onely; tho' we find them both very ornamently applied; ſome affecting to place them according to the *Slope*, others perpendicular to the *Horrizon*, and not to the *Cornice* which they ſeem to ſupport, as well as Beautifie; or rather to the Poſture of the *Rafters*-ends, which they repreſent. We ſometimes find *Dentelli* under the *Modilion*, but by none approv'd; a ſingle row of *Teeth*, or a plain *Liſt* only more becoming on thoſe occaſions, as well as for the Height of the *Drum* or *Tympan* (by which ſome diſtinguiſh the *Round* from the *Pointed* which they name *Frontons*) which ſome Noble *Statue*, or *Baſs-Relieve* may require a more than ordinary Elevation of; In the mean time, *D'Aviler*'s Figure following may give ſome Direction to Workmen:



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Divide the Line *a b* (which ſuppoſe the *Hypotenuſe* of the *Baſe*) into two equal Parts at the Point *c*, let down the *Perpendicular f e d* indefinite, in which *e d* being equal to *a b* from *d* as the Centre, deſcribe the Arch *a e b* and where it interſects the Perpendicular as at *e* there ſhall be the *Faſtigium* or Point of the *Tympane*.

There are other Methods in *Serlio*, and the Maſters; ſome *Iſocele*, whoſe Angles oppoſite to the *Baſe* are more obtuſe; others yet lower, and higher even to a full *Diameter*, as were thoſe *Pliny* call'd *Plaſtæ* for *Statues* and taller Figures, as alſo at the *Cima* or Point, and at each *Angle*, there ſtood of thoſe ſmaller Pedeſtals we ſpake of for the placing of *Statues*, *Buſts*, *Vrnes*, *Lamps* of Fire, *Pine Cones*, *Bowles*, or the like *Ornaments*, and theſe *Stylobata* were call'd

Acroteria, from ἄκρον *ſumma pars*, we may properly name them *Pinacles*, for ſo *Pinnæ* and *Batlements* were made ſometimes more ſharp, Towring or Spiry, as pleaſed the Workman; but where they ſtood in *Ranges* (as not unfrequently) with *Rail* and *Balauſters* upon flat Buildings, they ſtill retain'd their name, with this only difference, that ſuch as were plac'd between the *Angular* Points were (like ranges of *Pillars*) ſtyl'd the *Median* or middle *Acroteria*: For the moſt part a ſmall *Die* without any *Baſe*, in proportion ſomewhat leſs than the Bredth of the Neck of the *Column* (if there ſtand any directly under it) and equal in Height to the middle of the middle *Tympane*; and that at the very *Faſtigium* may be allow'd an eight Part more. *Acroteria.*

They did likewiſe ſometimes cover (eſpecially *Temples*, and ſuch Magnificent and Sacred Buildings) with a *Cupola*, which is that *Dome* or *Hemiſphærical* Concave made in reſemblance of the *Heavens*, and admitting the Light at the top *Center* or *Navil* only, without any *Lantern*, as is to be ſeen in that incomparable piece of the *Pantheon* yet extant: This is much in Vogue yet in *Italy*, and of late in *France*, eſpecially at *Rome* and *Florence*, but it is commonly with the *Lantern* and other *Apertures* to let in *Day* without expoſure to the Weather, as appears by that on the ſummit of Saint *Peters*; but it takes away, in my poor Judgment, ſomething from the ſolemneſs, and natural reſemblance of the *other*, which yet are happly better to be endur'd in the more *Eaſtern Countries* where the Weather is conſtant; as we ſee it Practic'd in what the Pious *Helena* erected in the *Holy Land*, and her Son *Conſtantine the Great*, or rather, that at preſent, by the Emperor *Juſtinian*, (one *Anthemius* of *Trales*, and *Iſidor* the *Miletan* being the Architects) upon that Magnificent Structure of *Santa Sophia* yet remaning at *Conſtantinople*, and to this Day imitated by the *Turks* for the Covering of their *Moſques*; and that it was an *Oriental* Covering and Invention, the Θόλος of the *Greeks* was doubtleſs de- *Tholus.*

riv'd from the *Hebrew* תָּלִי *Thala* ſignifying to *Suſpend* or hang as it were in the *Air* ; but the *Italian* Name ſeems to come from *Cuppa* a *Cvue* or great Waſhing-Bowl, which it much reſembles. As to the Name *Dome*, whether from the *Greek* δῶμα, a Covering (as *Du Lange*) or as *Voſſius*, *Domus*, I am not concern'd (but when they call it *Dome*, it ever ſignifies the *Cathedral)* 'tis commonly erected over the middle of the Building where the *Iſles* croſs, and ought to be in Height, *half* the *Diameter* of the *Church*, meaning the *Cuppa*, only (by ſome nam'd the *Pyramis*) and not the *Lantern* or *Flos*, by *Architects* ſo call'd, from ſome *Flowre*, or like Ornament which was plac'd upon it: In the mean time, we find ſome of theſe Coverings in other Shapes, and *Multangular*, not exceeding *Eight*; but they are nothing ſo graceful as the *Dome-Spheroid*: Sometimes alſo they are made to let in greater Light by a ſort of *Lucarr* Windows; by which are meant thoſe *Subtegularian* Windows that appear in our Roofs above the Cornices; of which ſome are ſquare with Pedaments; others Round or Oval and *Oxe-Eyed* as they term them, moſt accommodate to the *Cupola*, and had need have twice and an half the Height of Breadth, by reaſon of the diſtance, with circular *Frontoons*, whilſt *Windows* in upright Walls, ought not to be above a Fifth part leſs wide, than thoſe beneath them, which are ever to be even with the *Cornices* of the Ceiling: Antiently, Windows were open to the very *Floor*, or only clos'd with a *Balluſtre* and *Raile*, much ſafer, and as Commodious altogether to look into Streets, or enjoy the Proſpect as our late *Meniana* and *Balconies*, are which jettie out, and reſt only upon Scrolls and *Mutules* for Reaſons already mention'd: *Arched Vaults* in Cellars ſhould have Arched *Aperture* and Windows.

Other *Acceſſories* and *Ornaments* are alſo uſed in *Buildings* which I will only touch.

Niches.
Concha.

Niches, *quaſi Nidi*, Neaſts, of old *Concha*, are a kind of *Pluteus* or ſmaller *Tribunals* (as they are yet called in *Italy*) wherein *Statues* are placed to protect them from the down right Injuries of the *Weather*, as well as for Ornament to plain and ſimple *Walls*: As to their regular Sections (tho' as we have already Noted, there be nothing determin'd) one may allow them double; half, or quarter more of their Bredth, and half for the Cavitie, whether Circular or Square: The reſt ſuitable to the *Character* of the main Building, and proportion of the *Statue* deſign'd, and therefore in placing an *Hercules*, *Commodus* or larger Figure, a *Ruſtic*, or *Doric* Work and Ornament, would become them better than the *Corinthian* or *Compoſit* delicacy; fitter for the leſs robuſt, and more effeminate, whether naked as the *Greeks* Statues, or clad as were the *Roman*: And ſo in reſpect to ſituation; if low, or even to the *Area*, or much higher; the ſtatelier and taller *Figures* ſhould be plac'd in the lower

Niches: The ſhorter, over thoſe, and their Niches thrice the height of the bredth, tho' the *Figure* exceed not that of the *Impoſts.* Square *Niches* have a *third* of their largeneſs in depth, and twice the hight: When there happens a very large *Peere* or Square (as ſometimes between the *Windows*) they ſhould obſerve the proportion of the *Aperture* both for height and bredth, with ſuitable Decoration: But between *Columns* or *Pillaſters* ſtanding one upon the other, *Niches* are not ſo proper; becauſe they fill the Spaces too much; and where more than one is plac'd, the Interval ſhould be equal to their Bredth; and never to admit them at the *Coines* of a Building, as frequently we ſee them abroad to Inſhrine ſome *Saint*, that the Image may be ſeen in ſeveral Streets: In a Word, they too thick, and frequent *Niches* becomes no Building, and are unſufferable where a Cornice is broken to let them in to *Groups*, and Aſſemblies of more Figures, as the Action may require; the *Niche* is to be ſuited, and ſhould begin at the Floor or Pavement with *Plinth* or *Pedeſtal*, higher than for a ſtanding Figure, which is ever to be allow'd the firſt: And if plac'd in a ſpacious Court or Garden, the *Pedeſtal* ſhould be higher; ſo as the Statue may be viewed round about: As to farther Decoration, it were abſurd to Carve a *Mask*, *Satyrs* or *Lyons* Head, as we ſometimes ſee them, upon the *Key-ſtone*; leaſt ſtanders by, take the *Statue* for ſome two-headed Monſter; nothing more becoming it within, than the uſual *Eſculop*, whether wrought in the Stone, or Plaſter: Indeed *Niches* ſhew beſt without much *Ornament*, *Columns* or *Pillaſters*; unleſs plac'd at the end of ſome long *Gallery*, *Portic*, or *Veſtibule* of *Church*, *Exchange* or *Courts* of *Juſtice*, &c. Oval *Niches* do handſomely for *Buſts*, and *Vaſas*, if not ſet in too deep; and therefore may be allow'd to ſtand on a Scroll or *Mutule*: Laſtly, when *Niches* are made very much larger and higher, beginning from the *Pavement*, they were call'd

Tribunals, as of old it ſeems applied to all high and eminent Places, where the *Tribunes* of the People us'd to ſit as Judges: We have a Noble Reſemblance of *this* in that magnificent *Throne* deſcrib'd 1 *Reg.* 10. 19. built by *Solomon*, which ſeems to me to have been ſuch an ample *Nich* in which a *Principal* Perſon might ſit, as it were half *Canopied* over within the thickneſs of the Wall.

Tribunals.

In Walls likewiſe did they inſert many noble and moſt exquiſite *Sculptures* and *Hiſtorical Fables*, half wrought up, *Emboſs'd* and ſwelling, and ſometimes more then half, which *eminencies* they now call in *Italy* by the name of *Baſſe*, and *Mezzo relievo*: Theſe were ſometimes wrought in *Marble*, as in that famous *Abacus* and *Stylobata*, yet extant, of *Trajan's Pillar.* Their ordinary placing was in the *Fronts* of *Edifices*, as is yet to be ſeen in divers Palaces at *Rome*, and eſpecially in their *Villas* and Retirements of Pleaſure, which

Relievo.

which are frequently incruſted with them, but vilely imitated in our expoſed *Fretworks* about *London*, to the Reproach of *Sculpture*, eſpecially where it pretends to *Figures* on the out ſides of our *Citizens* Houſes. I well remember there was in one of the Courts of *Nonſuch*, ſeveral large Squares of *Hiſtorical Relieue* moulded off, or wrought in *Stucco* by no ill Artiſt (I think *Italian*;) which upon the Demolition of that Royal Fabrick, I hear, have been tranſlated, and ornamently plac'd by the late moſt Honourable *Earl* of *Barkley*, at his delicious *Villa Durden*'s in *Surry*, not far from *Nonſuch*; which is thus deſcrib'd by *Camden* (as lately publiſh'd by the very learn'd Mr. *Gibſon*) where ſpeaking of that Kingly Palace, he calls it *Magnificent to ſo high a pitch of Oſtentation, as one would think the whole Art of Architects were crowder'd into this ſimple Work*: And then as to *the Relieuo* (which appears to have ſtood expos'd there ever ſince the Reign of *Henry* VIII. who built the Houſe) *ſo many Images to the Life, upon the Walls thereof, ſo many Wonders of an Accompliſh'd Workmanſhip, as even Vie with the Remains of* Roman *Antiquity*. Indeed, this ſort of *Decoration* has of late been ſupplied by *Painting* in *Freſco*, and that by very able Hands, eſpecially Signior *Verrio*, &c. as 'tis frequently in *Italy* by the moſt Famous *Maſters*; which I wiſh the Inclemency of our ſeverer *Climate*, were as favourable to, as the Work deſerves.

Ornaments, however Gay and Fine they appear to the Eye, and are in many Caſes very laudable and neceſſary; there is yet no ſmall Judgment requir'd, how, and when to place them appoſitely; ſo as they do not rather detract from the Beauty of the Work, than at all contribute to it: Now by *Ornament* we underſtand whatſoever of *Sculpture* and *Carving* is not of conſtant uſe, or abſolutely neceſſary in all Members; ſuch as *Frutages*, *Faſtoons*, *Chaplets*, *Wreaths* and other *Coronary* Works: *Frets*, *Guilloches*, *Modilicns*, *Mutuls*, *Chartoches*, *Dentelli*, *Metops*, *Triglyphs*, *Ovola*, *Pine-Cones*: *Niches*, *Statues*, *Buſts*, *Relievos*, *Vrns*, &c. In a Word, all ſorts of *Mouldings*; *Vitruvius* under the name of *Ornament*, reck'ning the whole *Entablature*; in which the *Frize* ſeems to be the moſt proper Field for Decoration, as the moſt conſpicuous place, and where, tho' the *Sculptor* ſhew'd his Addreſs and Invention; The Antients (who ſpared nothing which might accompliſh the Publick Buildings) were not at all ſo laviſh, in over frequent and unneceſſary Gayities: Their *Temples*, *Amphitheaters*, *Circus*'s, Courts of *Juſtice*, *Fora*, *Ports* and Entries of *Cities*, *Priſons*; *Bridges*, *Baſilica*, Royal *Palaces* and other Buildings of State, where grave and Solid Structures void of thoſe little *Membrets*, trifling *Mouldings* and ſuperfluous Carvings, which takes away from that Majeſtic and *Grand Munier* that moſt becomes them: Reſerving thoſe richer *Acceſſories* and coſtly Finiſhings, for *Theaters*, *Triumphal Arches*, *Hiſtorical Columns*, and other

ther Oſtentous Pomps : Nor even in theſe did they uſe them promiſcuouſly ; but with great Judgment Symbolical to the Subject and Occaſion : And therefore thoſe Antient Ornaments would not ſuit ſo properly with the Ages ſince, and may I conceive lawfully be chang'd, without Preſumption, or Injury to any Eſſential Member: As if (for Inſtance) inſtead of *Sphinges* and *Griffons* plac'd before the Pagan *Temples*, (Guardians of *Treaſure* which was kept in thoſe Sacred Buildings) *Angels* ſhould be ſet before our *Churches*; And in the *Doric Frizes*, inſtead of *Ox-Sculls*, the Prieſts *Seceſpita*; *Guttæ*, *Acerra*, *Simpula* and other Sacrificing Utenſils ; We chang'd them in our *Churches* (where that *Order* beſt beſeems them) into *Cherubs*, Flaming *Hearts*, *Books* laid open ; the *Patin*, *Chalice*, *Mitre*, *Croſier*, &c. The Frontons of *Magazines* and publick *Munitions*: had the Sculps of Antique *Caſks*, *Targets*, *Battle-Axes*, *Thunderbolts*, the Battering *Ram*, *Catapults*, &c. Which we may anſwer with our Modern Artillery of *Canon*, *Bombs*, *Mortars*, *Drums*, and *Trumpets* and other Warlike Engines ; and to their *Roſtra*, *Rudders*, *Anchors*, *Tridents*, *Scalops*, &c. the Wonder-Working *Nautic-Box*, with whatever elſe of uſeful and Conſpicuous has improv'd our *Navigation*. The *Tympan* before *Courts* of *Juſtice* may become her *Statue*, ſitting on a *Cube*, with *Faſces*, *Axes* and other Emblems of *Magiſtracy*.

Thermæ were adorn'd with *Jarrs*, *Ampullæ*, *Strigils* in the *Frizes* : The *Mauſolea*, *Vrns*, *Lamps* and ſmoaking *Tapers* : *Hippodroms*, *Circus's* had the Statues of Horſes on the Fronts *Metæ*, *Obcliſes*, &c. The Publick *Fountains* were ſeldom without the *River Gods*, *Nymphs*, *Naides*, *Tritons Hippopotoms*, *Crocudiles*, &c. *Theaters* were ſet out with *Maſcara*, *Satyrs* Heads, *Mercuries Caduceus* : The Statues of *Apollo*, *Pegaſus* ; the *Muſes*, little *Cupids* and *Geny*, *Laureat Buſts*, &c. *Arches Triumphal* with *Relievo* of the Conquerors Expedition, *Trophies*, *Spoiles* and *Harnaſſe*, *Palms* and *Crowns*. And where *Tables* for Inſcriptions were inſerted to continue, or but only for a ſhorter time, as to Celebrate ſome ſolemn *Entrie*, a Princes *Coronation*, *Royal Nuptials*, adorn'd with *Deviſes*, and *Compartments* for Pomp and Show : The Contrivance was under the Direction of the *Architectus Scenicus*, and requir'd a particular Talent and Addreſs, *Poetic* and Inventive : In Sum, all Ornaments and Decorations in general, ſhould be agreeable to the Subject ; with due and juſt Regard to the *Order*, which the *Antients* Religiouſly obſerv'd ; tho' where (as we ſaid) it was not abſolutely Eſſential ; leaving out or putting in as they thought convenient ; for excepting the *Dreſs*, and *Tire* of the *Jonica Corinthian* and *Compoſita Capitele*, they were not obliged to charge the other Members with coſtly Ornaments ; ſo as they frequently left out the *Metors* and *Triglyph* in the *Frizes* of the *Firſt* (as we have already Noted) the *Dentelli*, *Ovolo* and quarter *Round*, in the Grand *Cornice* of the *Latter*, plain and without Carving ;

ving; neither did they often fill the *Pedeſtals* with *Relieuo*; nor the *Staves* in the *Flutings*; and rarely ever allow the *Corona* any inrichment at all, or ſo much as rounded; and were free to leave the *Doric Plancere* naked, or with ſimple *Guttæ* only. They were careful not to Multiply larger *Mouldings*, which ſometimes they alter'd, and now and then would ſeparate them with a ſmaller *Liſt* or ſimple *Fillet*; ſometimes uſing the Carved *Aſtragal*, and at another, the Plain; always leaving the *Liſt* of the Superior *Cornice* Flat, to ſhew us, that the ſafeſt Rule to go by, is to follow the *Character* of each Reſpective *Order*: And indeed how odly would the *Tuſcan* or *Doric* become the *Corinthian Coiſure*, or the ſpruce and florid *Corinthian* a *Tuſcan* Entablature: The ſame is to be conſidered in the *Key-ſtone* of *Arches*; Plain in the *Tuſcan* and *Dorica* with a moderate Projecture: The *Jonica* Scroll, ſerving us a *Prothyrides*, on ſuch occaſions may be richly Flower'd and Carv'd in a *Corinthian* or *Compoſit* Entrance, and where they ſuſquert Tables and *Menſulæ* for ſome Inſcription: *Roſes*, *Lyons*-Heads, *Eſcalops* and other decorations are allowable under the *Corona* with this Rule, that whether here, or under any *Roof* or *Ceiling* interlacing *Fretts*, be ever made as *Right Angles*: Laſtly, as to *Pocliæ*, *Rails* and *Baluſters*, ſo to humor the *Order*; that the *Tuſcan* be plain, but not too gowtie, or too cloſe to one another, or far aſſunder, that is, not exceeding *twice* the *Diameter* of the Necks; nor are they oblig'd to a conſtant Shape; for ſome ſwell *below*, others *above*; and ſome are made like *Termes*, all of them having their peculiar Grace and Beauty: What is ſaid of *Tuſcan* is to be underſtood of the reſt; ſo as the *Corinthian* and *Compoſita* may be Carv'd and Inrich'd without any Scruple, for any thing that appears to the contrary among the Antients, or our ableſt Maſters: To Conclude, not only the Roofs of Houſes, and their *Fronts* had their Adornments, but the *Floores* alſo were inlay'd with *Pavements* of the moſt precious Materials, as of ſeveral Coloured *Stones* and *Woods*, and this they call'd

Emblema.

Emblema, continued to this Day by the *Italians* in their *Pietra Comeſſa*; of which the moſt magnificent and ſtupendious *Chappel* of Saint *Laurence* at *Florence*, *Paul the Firſt's* at *Sancta Maria Maggiore* in *Rome*, are particular and amazing inſtances, where not only the *Pavement*, but likewiſe all the *Walls* are moſt richly incruſted with all ſorts of precious *Marbles*, *Serpentine*, *Porphirie*, *Ophitis*, *Achat*, *Rants*, *Coral*, *Cornelian*, *Lazuli*, &c. of which one may number near thirty ſorts, cut and laid into a *Fonds* or ground of *Black-Marble* (as our *Cabinet-Makers* do their variegated Woods) in the ſhape of *Birds*, *Flowers*, *Landskips*, *Grotesks* and other *Compartiments* moſt admirably Poliſhed, a glorious and everlaſting Magnificence: But where it is made of leſſer *Stones* or rather morſels of them, aſſiſted with ſmall *Squares* of thick *Glaſs*, of which ſome

Moſaica.

ſome are *Guilded*, or Cemented in the Stuc or Plaſter, it is call'd *Moſaic-Work*, *opus Muſivum*, and it does naturally repreſent the moſt curious and accurate ſort of *Painting*, even to the *Life*, nor leſs durable than the former, as is moſt conſpicuous in that Front of Saint *Marks* Church at *Venice*, the *Nave* or Ship of *Giotto* under the *Cupola* of Saint *Peters* at *Rome*, and the *Altar-piece* of Saint *Michael* near it: Theſe are the *Teſſellata* and *Vermiculata* or *Pavimenta aſarota* of the *Antients*, which no Age or expoſure Impairs, but of which I do not remember to have ſeen any Publick Work in our *Country*. In the mean time not to be forgotten are the *Floorings* of *Wood* which Her Majeſty the Queen *Mother* has firſt brought into uſe in *England* at Her *Palace* of *Sommerſet-Houſe*, the like whereof I directed to be made in a Bed-Chamber at *Berkley-Houſe*: The *French* call it *Parquetage*, a kind of *Segmentatam opus*, and which has ſome reſemblance to theſe Magnificencies; becauſe it is exceeding Beautiful and very Laſting: And this puts me in mind of that moſt uſeful *Appendix* joyn'd to Mr. *Richards* late *Traſlation* of the firſt Book of *Palladio*, and thoſe other Pieces of *la Muet* the *French Architect*, wherein, beſides what he has Publiſh'd concerning theſe kinds of *Timber-Floors*, &c. you have at the Concluſion of that *Treatiſe* a moſt accurate Account of their *Contignations* and Timberings of all ſorts of *Stories*, *Roofings*, and other *Erections*, with their uſe, *Scantlings* and proper Names, which, for being ſo perſpicuouſly deſcrib'd, deſerves our Commendation and Encouragement.

May this then ſuffice, not only for the Interpretation of the *Terms* affected to this Noble Art; but to Juſtifie the *Title*, and in ſome Meaſure alſo for the Inſtruction and Aid of divers Builders, on ſome occaſions, wherein they not ſeldom fail; eſpecially in the *Country* (where, for the ſaving a little Charge, they ſeldom conſult an experienc'd *Artiſt*, beſides the Neighbour *Brick-layer* and *Carpenter*) till ſome more dextrous and able Hand, and at greater Leiſure, Oblige the Publick, and our *Country Men*, with ſuch a Body and *Courſe* of *Architecture*, as with others *Monſieur Blondel*, *D'Avilar*, (and *inſtar Omnium* the Learned *Perault*, by his *Verſion*, and uſeful *Comments* on *Vitruvius*) have done for theirs.

Eum Architectum oportet uſu eſſe peritum & ſolertem, qui demere aut adjicere præſcriptis velit.

J. E.

FINIS.

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To the READER.

T*Here is no Man pretending to this* Art, *or indeed to any* other *whatſoever, who does not greedily embrace all that bears the Name of* Leon Baptiſta Alberti, *who was a* Florentine *Gentleman of Illuſtrious* Birth, *great* Learning, *and extraordinary Abilities in all the Politer* Sciences, *as he ſtands Celebrated by* Paulus Jovius, *and for which he became ſo dear to that great* Mecenas Lorenzo di Medici, *who choſe him, with* Marſilius Ficinus, Chriſtopherus Landinus, *and other the moſt refin'd Wits of that Age, to entertain his Academic Retirements and Solitude of* Camaldoli: *You have an ample* Catalogue *of his Learned Works,* Latin *and* Italian, *publiſh'd at the end of his Life by* Rafael du Freſne *that Great* French Virtuoſo, *together with the Hiſtory of thoſe many incomparable* Structures *deſign'd and conducted by this rare* Genius, *extant at this Day in* Florence, Mantoa, Rimini *and other Cities of* Italy; *as being indeed one of the very firſt that poliſh'd the now almoſt utterly loſt and extinguiſh'd Art of* Architecture; *in which how ſucceſsfully he joyn'd* Practice *to* Speculation, *there are aboundance of Examples, ſome whereof are wrought by his own Hands. He Compoſed three Books,* De Pictura, *full of incomparable* Reſearches *appertaining to that Noble* Art: *This of* Statues *was firſt Written in* Latin, *but it having never been my hap to find it (and I think it was never* Printed) *I made uſe of this* Verſion *out of the* Italian, *as it was long ſince Publiſhed by that Ingenious Perſon* Coſimo Bartoli, *and have ſubjoyn'd it to this Diſcourſe of* Architecture, *not only becauſe they cannot well be ſeparated, but for that the* Author *(being one of our* Parallel) *the* Argument *appear'd ſo appoſite and full of profitable Inſtruction to our Workmen, who for want of* theſe *or the like* Rules, *can neither ſecurely Work after the Life, or their own Inventions, to the immenſe Diſgrace of that Divine* Art. *This brief Account I thought fit to preſent thee,* Reader, *concerning this* Piece *of* Alberti'*s, it beivg the very* Firſt *of the* Kind *which ever ſpake our* Language.

R J. Evelyn.

COSIMO BARTOLI

To the moſt Excellent *Architect*, and *Sculptor*

BARTOLOMEO AMMANTI.

ALthough I am perfectly aſſur'd (my moſt ingenious Bartolomeo*) that you, who are ſo univerſally accompliſh'd, and in particular, ſo skilful, and well verſed in* Architecture *and* Sculpture, *have no need of thoſe* Rules *and* Precepts, *which the moſt judicious* Leon Baptiſt Alberti *has Publiſh'd concerning* Statues ; *Yet I eaſily perſwaded my ſelf that this Addreſs of them to* You, *would not be a thing unacceptable, as being to a* Perſon *ſo well able to Judge of that rare Fancy, and incomparable Worth of the ſaid* Leon Baptiſta, *who in a time wherein little or nothing of* Sculpture *was known (all good* Arts *and* Sciences *being then in a manner annihilated and wholly extinct throughout* Italy, *by Reaſon of the many inundations of* Barbarians*) imploy'd the utmoſt of his Abilities to open an eaſy and ſecure way for our* Youth: *who though unexperienc'd themſelves, delighted in this moſt noble* Art ; *and to incite them to joyn diligent Practice, with the Obſervation of ſure and unerring* Rules. *No wonder therefore, if from that time forward ſuch wonderful Progreſs has been made in this* Art, *as has brought it to that Perfection wherein it is ſeen flouriſhing at this Day : So as in this Age of ours, we have no need to envy thoſe ſo much admired* Statues *of the moſt celebrated* Scuptors *of the Antient* Romans, *when we ſhall well conſider what has been perform'd by our Countryman* Donato, *and not many Years ſince, the Divine,* Michael Angelo Buonaroti ; *as after him, by* Baccio Bandinelli, Benuenuto Cellini, *and laſtly, by* Your Self ; *whereof, that I may produce ſome* Inſtances *(beſides thoſe many* Statues *which are extant of all your Hands) proclaiming your ſingular Merits to the Admiration of all Men, there are to be ſeen in the* Piazza *of their* Highneſſes *Royal* Palace, *the moſt beautiful* Judith ; *the moſt ſtupendious* Coloſſo *of* David, *the robuſt and fierce* Hercules ; *the moſt maſterly handl'd* Perſeus, *together with all his rare and curious Adornments ; and which is indeed the greateſt of all the reſt,* Your *own* Neptune, *with the other three* Statues *accompanying it, cut out of* one *intire piece of* Marble, *and fram'd with ſo magiſterial a height of Art, as not only produces wonder in all that attentively behold it ; but does as it were wholly aſtoniſh them to contemplate the* Ingenuity, *the* Science, *the* Induſtry, *the* Diligence, *the* Affection, *and in fine, the never to be ſufficiently celebrated* Skill *of the* Artiſts. *Vouchſafe therefore that theſe (however impoliſh'd)* Inſtructions, *ſo much conducing to the information of unexperienc'd Youth, be recommended to the publick view under Your* Name *and Protection: And as it has ever been Your Cuſtom heretofore, Love your* Friends, *amongſt whom I Conjure You to eſteem me none of the leaſt.*

Farewell.

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LEON BAPTISTA ALBERTI
OF
STATUES.

I Have often thought with my ſelf that the ſeveral Arts, whereby Men at firſt Induſtriouſly ſet themſelves to expreſs, and repreſent by Work of Hand, the Shapes and Similitudes of Bodies, ſpringing from natural Procreation, took their beginning from the accidental obſervation of certain Lineaments either in *Wood*, or *Earth*, or ſome other ſorts of Materials, by Nature ſo diſpos'd, that by altering or inverting ſome thing or other in their form, they appear'd capable of being made to reſemble the Figures and Shapes of living Creatures; and thereupon, having ſeriouſly conſider'd and examin'd what Courſe was beſt to take, they began with utmoſt Diligence and Induſtry to try and make experiment, what was neceſſary to be added, or taken away, or in any other kind perform'd, for the bringing of their Work to ſuch perfection as might cauſe it exactly to reſemble the intended form, appearing, as it were, the very ſame thing; ever marking as they wrought, to ſee if they had fail'd in any thing, and ſtill mending as they found occaſion, ſometimes the *Lines*, ſometimes the *Superfices*, *Poliſhing* and *Repoliſhing*, till at length (not without much Pleaſure and Satisfaction) they had accompliſh'd their deſire: So that it is not a thing ſo much to be admir'd, that by frequent Practice in Works of this Nature, the *Fancies* and *Ingenuities* of Men have been from time to time improv'd, and advanc'd to that height, that at laſt (without taking Notice of any rude *Draughts* in the Material they wrought upon, to help them in their intended *Deſigns*,) they became able by their Skill to *Deſign* and expreſs upon it whatſoever form they pleaſed, though in a different manner, ſome one way and ſome another; for as much as all were not taught, or apply'd themſelves to proceed by the ſame Rule or Method. The Courſe that many take to bring their intended *Figures* to Perfection, is both by adding to, and taking from the Material; and this is the way of thoſe that work in *Wax*, *Plaiſter* or *Clay*, who are therefore term'd *Maeſtri de ſtucco*, others proceed by taking away, and carving out of the Material that which is ſuperfluous, whereby it comes to paſs that they produce out of whatſoever Maſs of *Marble*, the perfect Shape and Figure of a Man which was there hiddenly but potentially before; and thoſe that work this way, we call *Sculptors*: next of kin to whom are they that grave in *Seals* the Proportions of Faces, that before

fore lay hid in the Matter out of which they were raiſed. The third ſort is of thoſe that perform their Work by only adding to the Material; as *Silver-Smiths*, who beating the *Silver* with Mallets, and diſtending it into thin *Plates* of what Faſhion or Size they think fit, lay thereupon their *Superſtructure*, adding and inlarging till they have faſhion'd and brought to Perfection their intended *Deſign.* And here perhaps ſome may imagine, that in the number of this laſt ſort of Artiſts *Painters* are to be reckon'd, as thoſe who proceed by way of adding, namely by laying on of *Colours*; but to this they anſwer, that they do not ſtrive ſo much to imitate thoſe *Lights* and *Shadows* in Bodies which they diſcern by the Eye, by the adding or taking away of any thing, as by ſome other *Artifice* proper and peculiar to their way of Working: But of the *Painter* and his Art we ſhall take occaſion to ſpeak elſewhere. Now, as to thoſe ſeveral kinds of *Deſigners* which we have here before mention'd, though they go ſeveral ways to Work, nevertheleſs they all direct their Aims to this end, namely, that their Labours may appear to him that ſhall well obſerve them, as Natural, and as like the Life as may be; for the bringing of which to effect, it is moſt evident, that by how much the more exquiſitly they follow ſome certain determin'd Rule or Method (which *Rule* we ſhall afterwards deſcribe) ſo much the fewer *Defects* will they be guilty of, ſo much the fewer *Errors* commit, and in all manner of Accounts their Works will ſucceed and come off with the greater Advantage: What ſhall we ſay of *Carpenters*? What would they perform to any purpoſe, if it were not for the *Square*, the *Plummet*, the *Line*, the *Perpendicular*, and the *Compaſſes* for the making of *Circles*, and by the means of which Inſtruments they Deſign their *Angles*, their *Streight-Lines*, their *Levells*, and other their Proportions, thereby finiſhing and compleating all they take in hand with the greater exactneſs, and without which they would be able to do nothing ſubſtantially? Or can we rationally imagine, that the *Statuarie* could perform ſuch excellent and admirable Works by chance, rather then by the help of ſome certain and Infallible *Rule* or *Guide*, drawn from *Reaſon* and *Experience*? Wherefore this we ſhall lay down for a *Maxim*; That from all *Arts* and *Sciences* whatſoever, there are drawn certain *Principles*, *Rules*, or natural *Concluſions*, which if we ſhall apply our ſelves with all care and diligence to examine and make uſe of, we ſhall undoubtedly find the benefit of, by the perfect accompliſhment of whatſoever we take in hand: For as we were firſt inſtructed by Nature, that from thoſe Lineaments which are found in pieces of Wood, Earth, Stone or other Materials, may be drawn (as we ſaid before) the forms of whatſoever Body or Creature the concourſes of thoſe Lines reſemble; ſo alſo the ſame Nature hath taught us certain helps and means, by which we are guided to proceed ſecurely and regularly in what we undertake, and by the conſtant obſerving and uſe whereof, we ſhall moſt eaſily, and with the greateſt Advantage, arrive at the utmoſt perfection of the Art or Faculty we ſtrive to attain. It now remains that we declare what thoſe helps are which Statuaries are chiefly to make uſe of;

and becauſe their principal part is to make one thing to imitate and reſemble another, it will be requiſite to ſpeak firſt of *Reſemblance*, a ſubject our Diſcourſe might be abundantly ample in, ſince Reſemblance is a thing ſo natural and obvious, that it offers it ſelf to our view and obſervation in in each viſible Object; not only every Animal, but even all things whatſoever that are of the ſame Species, being in ſome reſpect or other correſpondent and alike: On the other ſide, there are not in the whole race of Mankind any two to be found ſo exquiſitely reſembling each other, as not to differ ſome one Tittle in the tone of the Voice, or the Faſhion of the Noſe, or of ſome other Part; to which we may add, that thoſe Perſons whom, having firſt beheld Infants, we come to ſee Children of ſome growth, and afterwards at the Age of Manhood, if at length we meet them when grown Old, we ſhall find them ſo chang'd and alter'd by time, that we ſhall not be able to know them; for as much as the aptitude and poſition of thoſe numerous Lines and Features in the Countenance ſtill alters, and vary's from time to time, as Age comes on; nevertheleſs in the ſame Viſage there remains a certain natural and peculiar form, which maintains and keeps up the reſemblance inhærent to the Species: But we ſhall wave theſe things, as belonging rather to a particular Diſcourſe, and return to purſue what we firſt took in Hand to Treat of.

The Deſign and Intention of making reſemblances among *Statuaries*, I take to be twofold; the firſt is, that the Deſign or Work intended for the reſemblance of any ſort of Creature (for Example, ſuppoſe it a Man) be ſo fram'd, that it come as near in Similitude as may be to the ſaid Species, without regarding whether it repreſent the Image of *Socrates* more than that of *Plato*, or any other known individual Perſon, ſince it is enough that the Work reſembles a Man in general. The other Intention proceeds farther, and aims not only at the repreſenting the Likeneſs of Man in general, but of this or that particular Man; as namely, of *Cæſar*, or *Cato*, not omitting to deſcribe the very Habit he wore, the Poſture he affected, and the Action he uſed; whether ſitting in his Tribunal, or making Speeches to the People: It being the proper Buſineſs of thoſe who addict themſelves to this laſt way of Repreſentation, to imitate and expreſs every Habit, Poſture and Ayr, peculiar to the Body of that known Perſon whom we intend to repreſent. Anſwerable to theſe two Intentions, (that we may handle the matter as briefly as is poſſible) there are eſpecially requiried two things; that is to ſay, Proportion, and Limitation. In treating therefore of theſe two particulars, that which we have to do, is to declare, Firſt, what they are: Next, to what uſe they ſerve for the bringing of our Deſign to Perfection: Beſides which, I cannot but by the way, take Notice of the great Benefit that is to be made of them in Reſpect of the wonderful and almoſt incredible Effects which they produce; inſomuch that whoſoever ſhall be well inſtructed in them, ſhall be able by the help of ſome certain infallible Marks, exactly to obſerve and point out the Lineaments, ſituation and poſiture of the Parts of any Body, though it were a thouſand Years after, ſo as not to fail to place it exactly at his Pleaſure, in the very ſame direction and poſture it ſhould have hapned to have ſtood in before; and in ſuch ſort, as there ſhould not be the leaſt part of the ſaid Body, which ſhould not be reduc'd and reſituated toward the very ſame point of *Heaven* againſt which it was originally directed: As if, for Example, You would point out the place with your Finger where the Star of *Mercury* or the new *Moon* would riſe, and it ſhould happen to riſe in a direct Angle over againſt the point of the *Knee*, *Elbow*, *Finger*, or any other Part; moſt certain it is, that by theſe means and helps all this may be done, and that ſo preciſely that there ſhould not follow the leaſt failing of Error imaginable; nor need there any doubt be made of the certainty hereof. Beſides this, ſuppoſe I ſhould take one of the Statues of *Phidias*, and ſo cover it over with *Wax* or *Earth*, that none of the Work could be diſcern'd, and that it ſhould appear to be only a meer ſhapeleſs Trunk, You might by theſe Rules and helps certainly know how to find out in one place, by boaring with a Wimble, the pupil of the *Eye*, without doing it any harm by touching it; and in another place the *Navel*, and finally in another the great *Toe*, and ſo other parts in like manner; by which means you will gain a perfect Knowledge of all the Angles and Lines, whether far diſtant one from another, or nearly concurring together: You may alſo, beginning which way you will, and whether following the Original, or the Copy, not only *Draw* or *Paint*, but alſo put down in *Writing*, the various Courſe of the Lines, the Circumferences of the Circles, the poſitions of the Parts, in ſuch ſort that by the aforeſaid helps and means you need not doubt the being able to produce with eaſe ſuch another Figure perfectly reſembling, and of what ſize you pleaſe, either leſs, or juſt of the ſame magnitude, or of an hundred Fathoms in length; nay, I dare be bold to ſay that were there but Inſtruments to be had anſwerable to ſo great a Deſign, it were not only not impoſſible, but even no hard Matter, to make one as big as the Mountain *Caucaſus*; and that which perhaps you may moſt wonder at, is, that according as the matter might be order'd, one half of this Statue may be made in the Iſland of *Pharos*, and the other half wrought and finiſh'd in the Mountains of *Carrara*; and that with ſuch exact Correſpondence, that the Joyntures and Commiſſures of both parts perfectly fitting each other, they may be united into one compleat Statue reſembling either the Life, or the Copy after which it ſhall have been Figur'd: And for the performing of this ſo ſtupendious a Work, the Manner and Method will appear ſo eaſy, ſo perſpicuous and expedite, that for my part I conceive it almoſt impoſſible for any to err but thoſe that ſhall Induſtriouſly, to make Tryal of the Proof of this Aſſertion, work contrary to the Rules and Method enjoyn'd. We do not hereby undertake to teach the way of making all kind of reſemblances in Bodies, or the Expreſſing of all thoſe various Aſpects which reſult from ſeveral differing and contrary Paſſions and Affections; ſince it is not the thing which we profeſs to ſhew, how to repreſent the Countenance of *Hercu-*

les when he Combats with *Antæus*, with all the height of Magnanimity and fierceneſs which would be requiſite upon ſuch an occaſion; or caſting an obliging, chearful and ſmiling Air, when he Courts his *Deianira*; ſo as that the Countenance of the ſame *Hercules* ſhould upon ſeveral occaſions be repreſented with as various Aſpects: But our purpoſe is rather to take Notice of all the different Figures and Poſtures that are incident to a Body from the divers Situations, Geſtures or Motions of the ſeveral Members or Parts thereof; for as much as the Proportions and outward Lines are one way terminated in a Body that ſtands upright, another way in him that ſits, another way in one that is lying down, another way in thoſe that turn or incline themſelves toward this or that ſide; and ſo, in like manner, in all other Geſtures and Motions of the Body, of which way of repreſentation our Intention is at this time; that is to ſay, in what manner, and by what certain and infallible Rules, theſe Geſtures and various diſpoſitions of the Body may be imitated and repreſented: which rules, as we ſaid before, are reduc'd to two Principal Heads, namely, *Proportion* and *Limitation*: And firſt we ſhall treat of *Proportion*, which is indeed no other then a conſtant and certain Obſervation, by examining the juſt number and meaſures, what Habitude, Symmetrie and Correſpondence all the parts of the Body have one towards another, and that in Reſpect of every Dimenſion of the Body, both as to *Length*, *Breadth* and *Thickneſs*.

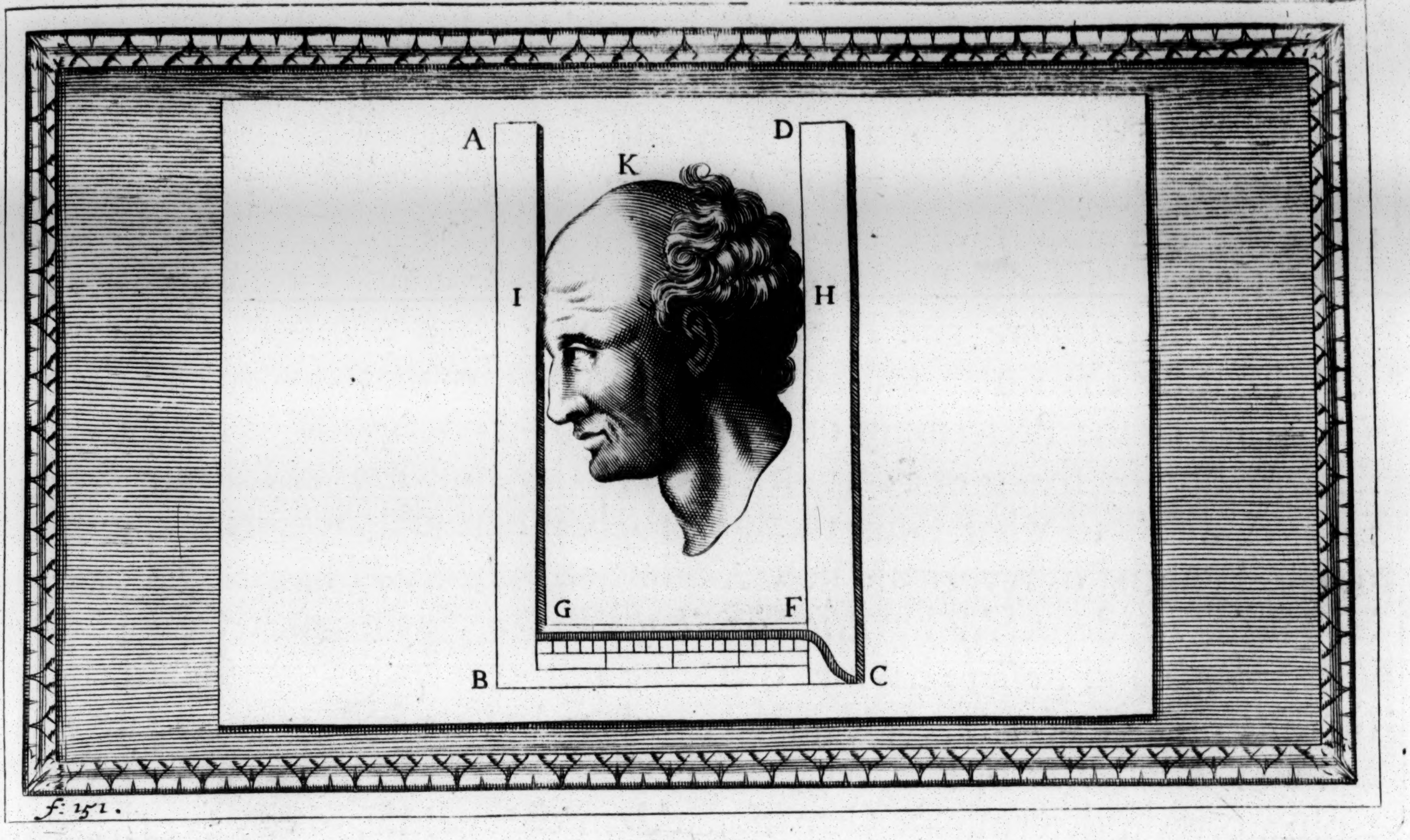
This Obſervation is made by two ſorts of Inſtruments, a large Ruler, and two moveable Squares; with the Ruler we take the Lengths of the Parts, and with the Squares we take their Diameters and all the other Proportions of the ſaid Meaſures. Upon this Ruler then let there be a line drawn of the length of the Body which you would meaſure, that is to ſay, from the Crown of the Head to the ſole of the Foot: Whence Note by the way, that to meaſure a Man of a ſhort Stature, you are to uſe a ſhorter Ruler, and for one of a longer Stature, a longer Ruler: But whatſoever the Length of the Ruler be, it is to be divided into ſix equal Parts, which Parts we will Name Feet, from whence we will call it the Foot-meaſure; and each of theſe Feet ſhall again be divided into ten equal parts, which we may term Inches.

The whole Length therefore of this Model or Foot-meaſure will conſiſt of 60 Inches; every one of which is again to be ſub-divided into 10 equal Parts, which leſſer Parts I call Minutes; ſo that through this diviſion of our Meaſure into Feet, Inches and Minutes, the total of the Minutes will amount to the Number of 600. there being in each of the 6 Feet 100. Now, for the meaſuring of a Man's Body by this Inſtrument, we are thus to proceed: Having divided our Ruler according to the foreſaid manner, we are to meaſure and obſerve by the Application thereof, the diſtances of the Parts of the ſaid Body; as for Inſtance, how high it may be from the ſole of the Foot to the Crown of the Head, or how far diſtant any one Member is from another: As how many Inches and Minutes it may be from the Knee to the Navel, or to the Cannel Bone of the Throat, and ſo in like manner any other Parts; Nor is this Courſe to be at all ſlighted or derided either by *Sculptors* or *Painters*, ſince it is a thing moſt profitable, and abſolutely neceſſary; for as much as the certain Meaſure of all the Parts being once known, we ſhall have gain'd a moſt eaſy and ſpeedy determination how to proceed in our Work with any of the ſaid Parts or Members without committing the leaſt Error: Never think it a Matter worth Regard or Notice, if any capricious humoriſt ſhall Peradventure find fault that this Member is too long, or that too ſhort; ſince your Model or Foot-meaſure (which is the Rule that muſt always direct and govern your Work, and then which you cannot go by a more infallible Guide) will ſoon determine whether you have proceeded well or ill; and doubtleſs when you ſhall have maturely conſider'd and examin'd theſe things, you will not be to ſeek in thoſe infinite other Advantages wherein this Foot meaſure will prove ſerviceable, eſpecially in knowing how with abſolute certainty to limit and determine the longitude of the Parts in a Statue of a greater Magnitude, as well as in one of the leſſer.

So as if it ſhould happen that you were to make a Statue of 10 Cubits, or what ever other dimenſion, it would be requiſite to have your Ruler, Model, or Foot-meaſure likewiſe of 10 Cubits, and divided into ſix equal parts, which ſhould have the ſame Correſpondence one with another, as thoſe of the leſſer Ruler: In like manner ſhould the Inches and Minutes be proportion'd, whence alſo the uſe and manner of working would be the ſame with the other; ſince half the Numbers of the greater have the ſame Proportion to the whole intire, as half the Numbers of the leſſer have to the whole intire of the leſſer. Wherefore according as the ſize of your Work happens to fall out, your Ruler is to be made proportionably.

We come next to treat of the Squares, which are to be two; the firſt of which ſhall be made after this manner: Let two Rulers, in the nature of ſtreight Lines, *i. e.* A B and B C be joyn'd together ſo as to make a right Angle; the firſt Ruler A B falling Perpendicular, the other B C ſerving for the Baſe: The bigneſs of theſe Squares is to be ſo order'd, that their Baſes conſiſt of at leaſt 15 Inches, according to the Proportion of your main Ruler, which, as we ſaid before, is to be made bigger or leſſer anſwerable to the proportion of the Body you would meaſure: Theſe Inches therefore with their Points and Minutes (however they may fall out) being taken exactly from the ſaid Ruler, you muſt ſet down upon your Baſe, beginning to reckon from the Point of the Angle B, and ſo Proceeding on towards C.

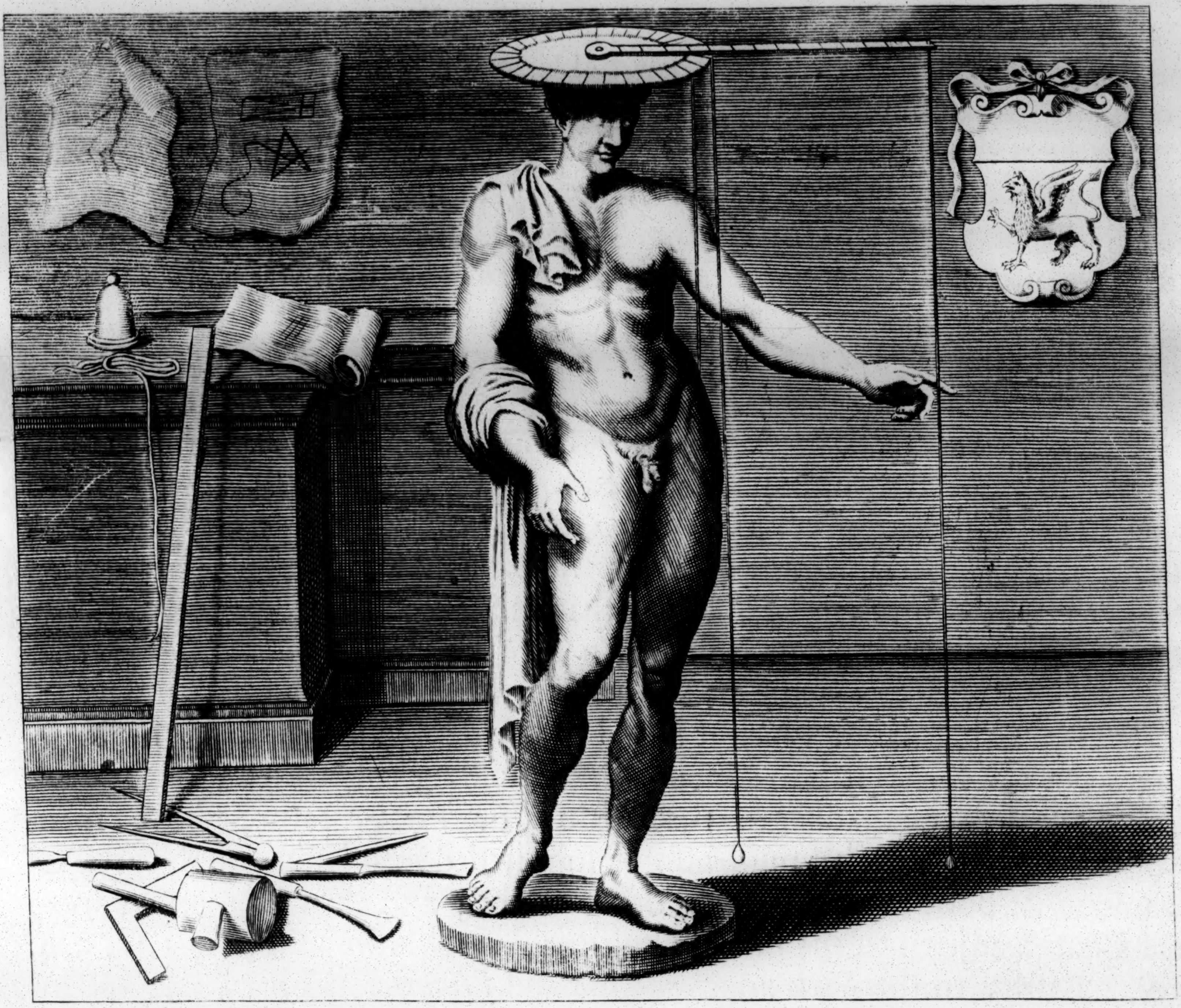
The Square being thus mark'd and divided, as is to be ſeen in the Example there is A.B C. to be adjoyn'd unto it another Square made after the ſame manner, according as it is demonſtrated by the Letters D F G ſo as that G F. may ſerve both for ſtreight Line and Baſe to both. Now to ſhew the uſe of theſe Inſtruments, I undertake to meaſure the Diameter of the thickeſt part of the Head H I K by bringing the two ſtreight Rulers A B and D F of each Square exactly oppoſite to each other, to touch the two oppoſite Points of the thickeſt part of the Head, and by applying interchangeably to one and the ſame Level, the Baſe-lines of the ſaid Squares; by which means from the Points H I, which are touch'd by the ſtreight Rulers of the ſaid Squares, we ſhall diſcover the exact Diameter of the Head.



And after this manner, the thickneſs and bigneſs of any Part of the Body whatſoever may with great eaſe and accurateneſs be found out: Many uſes and advantages we could reckon up, which might be made of this Ruler and theſe Squares, were it needful to inſiſt now upon them; there being ſeveral other ways, much after the ſame manner, which the meaneſt Capacity may of himſelf find out, for the meaſuring of the Diameter of any Part; as for Example, ſuppoſe one would know how much the Diameter is from one Ear to the other, and whereabouts it interſects the other Diameter which paſſes from the Head to the Nuca, or the like. Laſtly our Workman may ſafely make uſe of this Ruler and theſe Squares as moſt faithful Guides and Counſellors, not only for the performing of any part of his Work, but alſo at the very firſt, and before he ſets upon it, he will receive much Light by the help of theſe Inſtruments, how to begin and go about it; in ſo much that there will not be the leaſt Part of the Statue he is to make, which he will not before have examin'd and conſider'd and render'd moſt eaſy and familiar to him; for Example. Who but a very arrogant Perſon would take upon him to be a Maſter Ship-Wright that had not the perfect Knowledge of all the ſeveral Parts of a Ship, and how one kind of Ship differs from another, and what thoſe particular Parts are which belong to one Ship more than to another? And yet who is there of our Sculptors, let him be a Man never ſo Subtle and Experienc'd in his Art, who if it ſhould be demanded of him, upon what Ground or Conſideration he has made this Member after this manner, or what may be the Proportion of this or that Member to the whole Structure of the Body? I ſay, who is there ſo Diligent and Accurate as to have well conſider'd and obſerv'd all that is requiſite, and which becomes that Perſon to know who would perform as he ſhould do the Art whereof he makes Profeſſion? Whereas doubtleſly all Arts and Faculties are moſt Advantageouſly learn'd by Rule and Method, and by the Knowledge of ſome demonſtrable Operation that is to be perform'd; nor ſhall any one attain to the perfection of any Art whatſoever, who hath not firſt Comprehended every ſeveral Part and Branch of the ſaid Art. But thus having ſufficiently treated of *Meaſure* and *Proportion*, and after what manner it is to be found out by the Ruler and Squares; it remains that we ſpeak next of *Limitation* or the Preſcribing of *Bounds*: This Preſcription of *Limits* is the determining or fixing of a certain Period in the drawing of all our Lines, ſo as to direct to what Point they are to be continu'd, whether extended out in Length, or reverſed; how Angles are to be fix'd, how Parts are to be raiſed, or depreſs'd by *Alto*, or *Baſſo Relievo*, as Artiſts term it; each *Line*, *Angle* and *Relievo* having their due and certain Places aſſign'd them by the Conduct of a ſure and perfect Rule: And the beſt way to put this Rule of *Limitation* in Practice, will be by a Line and Plummet, falling from a certain determinate Centre plac'd in the middle, whereby the diſtances and extremities of all the Lines may be marked out and taken Notice of, as far as the utmoſt Bounds every way of the ſaid Body extends: But between the Meaſure deſcrib'd above, and this Aſſignation of *Limits*, there is this difference, namely, that that Meaſure looks farther backward, and ſprings from a more Native and Original Conſideration, as Grounded upon more Common and Univerſal Principles, which are by Nature more firmly and ſubſtantially Inhærent in all Bodies; as the *Length*, *Largeneſs* and *Thickneſs* of the Parts; whereas the preſcribing of *Bounds* is Grounded upon the preſent and accidental Variety of Poſtures, reſulting from the different Diſpoſitions and Motions of the ſeveral parts of the Body, ſhewing the manner how to Limit and Faſhion thoſe Poſtures according to the *Maxims* of Rule and Art.

Now, for the better performance of this laſt part of Regular Operation, we ſhall recommend this following Inſtrument, which is to conſiſt of three parts or branches; that is to ſay, an *Horizon*, a *Style*, and a *Plumb*: The *Horizon* is a *Plane* deſign'd upon a Circle, which Circle is to be divided into equal parts mark'd with their ſeveral Members, and their Subdiviſions ſet over againſt each part: The *Style* is a ſtreight Ruler, one end whereof is fixt in the Centre of the ſaid Circle, the other end moves about at Pleaſure, ſo as that it may be eaſily transfer'd and directed from one Diviſion of the Circle to another: The *Plumb* or *Plummet* is a Line or Thread which falls Parallel from the Top of the *Style* down to the Floor or Plane, upon which the Statue or Figure ſtands whoſe Members and Lineatures are to be meaſur'd and limited: For the manner of making this Inſtrument, let it be thus; Take a Board well plain'd and ſmooth'd, upon which let a Circle be drawn having three Foot Diameter, and let the Extremity of the ſaid Circle's Circumference be divided into equal parts, according as *Aſtronomers* divide their *Aſtrolabes*, which parts we will call Degrees; and let every of theſe Degrees be ſubdivided again into as many other parts as ſhall be thought fit; as for Example, ſuppoſe every Degree be ſubdivided into ſix leſſer parts, which we may call Minutes; to all which Degrees adjoyn the ſeveral Numbers, *viz.* 1, 2, 3, 4, with the reſt in order, till the Numbers belonging to all the Degrees be ſet down. This Circle, thus made and order'd, we call'd the *Horizon*, to which we are to fit our moveable *Style*, being alſo to be made after this manner; Take a thin ſtreight Ruler, three Foot in Length, and faſten one of the ends thereof (with a Pegg) to the Centre of its *Horizon* or Circle, in ſuch a manner, that though the ſaid end is not to be mov'd from the Centre, yet the Peg that faſtens it is ſo far to be relax'd, that the whole Ruler may have Liberty to move and play about from one part of the Circle to another, whilſt the other Extream extends it ſelf a good way beyond the Circumference of the ſaid Circle about which it is to be mov'd: Upon this Ruler or *Style*, mark out the Inches it is to contain, diſtinguiſhing them with ſeveral points between, after the manner of the Module or Foot-meaſure above mention'd; and theſe Inches muſt alſo be ſubdivided into leſſer equal parts, as was likewiſe done in the foreſaid Foot-meaſure; and then beginning from the Centre, adjoyn to the Inches alſo their ſeveral Numbers, *viz.* 1, 2, 3, 4, *&c.* Laſtly, to this *Style* annex a Line and *Plummet*. This whole Inſtrument thus Deſcrib'd conſiſting of *Horizon*, *Ruler*, and *Plummet* we ſhall call our *Definitor*.

This *Definitor* is to be made uſe of in this manner: Suppoſe the *Original* or *Copie*, the Limits of whoſe parts we would determine, were a Statue of *Phidias*, holding with the Left Hand, on one ſide of a *Chariot*, the Raines of a Horſes Bridle: This *Definitor* is to be ſet upon the Head of the Statue in ſuch ſort, that it may lie exactly level upon the plain of the Centre, being plac'd juſt upon the very midſt of the Head of the Statue, where it is to be made faſt with a Peg: Then Note that point where it is faſtned upon the Head of the Statue, and mark it by ſetting up a Needle or Pin for the Centre of the Circle: Next, by turning the Inſtrument about from the determin'd place in the *Horizon*, make out the firſt deſign'd Degree, ſo as you may know from whence it is mov'd; which may beſt be done after this following manner: Bring about the moveable Ruler, which is the *Style*, upon which the Thread and *Plummet* hangs, till it arrive at that place of the *Horizon* where the firſt Degree of the *Horizon* is to be ſet down; and holding it faſt there, turn it about together with the whole Circle thereof, until the Line of the *Plummet* touch ſome principal part of the Statue, that is to ſay, ſome Member particularly Noted above all the reſt, as the Finger of the Right Hand or ſo.



Which may ſerve as the appointed place from whence upon every new Occaſion the whole *Definitor* may be mov'd, and afterwards brought back again to the ſame where it ſtood at firſt upon the ſaid Statue; yet ſo, that by the turning of the *Style* about the *Pin*, which pierceth from the top of the Head of the Statue, through the Centre of the *Definitor*, the *Plummet* which before fell from the firſt Degree of the *Horizon*, may return to touch the aforeſaid Finger of the Right Hand. Theſe Things thus order'd and deſign'd, ſuppoſe that we would take the Angle of the Right Elbow, ſo as to keep the Knowledge of it in Mind, or to Write it down; the way is as followeth: Fix the *Definitor* with its Centre which is upon the Head of the Statue, in the place and manner aforeſaid, in ſuch ſort, that the Plane whereon the *Horizon* is deſign'd, may ſtand firm and immoveable; then turn about the moveable *Style*, till the Line of the *Plummet* come to touch the Left Elbow of the Statue which we would Meaſure: But in the performing of this ſort of Operation there are three things to be obſerv'd, which will much conduce to our Purpoſe: The firſt is, That we mark how far the *Style* in the *Horizon* comes to be diſtant from the place where it ſhall have been firſt mov'd, taking Notice upon what Degree of the *Horizon* the *Style* lies, whether on the twentieth, thirtieth or whatſoever other: Secondly, Obſerve by the Inches, and Minutes mark'd in the *Style*, how far diſtant the Elbow ſhall be from the Centre of the Circle: Laſtly, take Notice by placing the Module or Foot-Meaſure Perpendicularly upon the Plane whereon the Statue ſtands, how many Inches and Minutes the ſaid Elbow is raiſed above the ſaid Plane, and write down theſe Meaſures in a Book or piece of Paper: For Example, thus, the Angle of the Left Elbow is found in the *Horizon* to be 10 Degrees and 5 Minutes; in the *Style* or Ruler 7 Degrees and 3 Minutes; that of the Plane in the Module amounts to 40 Degrees and 4 Minutes; and thus by the ſame Rule may be meaſur'd and computed all the reſt of the principal Parts of the ſaid Statue or Copy; as for Inſtance: The Angles of the Knees, and of the Shoulders and other ſuch like Parts that are to be reckoned among the *Relievi*: But if you would meaſure Concavities, or thoſe Parts which recede inward, and are ſo remov'd out of the reach of Sight and eaſy Acceſs, that the *Plummet*-line cannot come to touch them (as it happens in the Concavities beneath the Shoulders, in the Regions of the Reins, &c.) the beſt way to find them is as follows: Add to the *Style* or Ruler another *Plummet*-line which may reach as far as the ſaid Concavitie; how far diſtant it be from the firſt, it is not Material ſince by theſe two *Plummet*-Lines falling Perpendicularly, and being Interſected by the *Gnomon* of the plain Superficies above to which they are faſtned, and which extends it ſelf as far as the Centre of the Statue, it will appear how much the ſecond *Plummet*-line is nearer than the firſt to the Centre of the *Definitor*, which is therefore call'd the middle Perpendicular.

Theſe Things thus demonſtrated, being once ſufficiently underſtood, it will be an eaſy Matter to Comprehend what we before commended to your Obſervation; namely, that if the ſaid Statue ſhould chance to have been cover'd over to a certain Thickneſs with *Wax* or *Earth*, you might yet by a Piercer, with great eaſe, readineſs and certainty come to find out whatſoever Point or Term you would deſire to find in the ſaid Statue; for as much as it may be clearly Demonſtrated, that by the turning about of this *Gnomon*, the Level makes a Circular Line like the Superfices of a *Cylinder*, with which ſort of Figure the Statue ſo ſuperinduc'd as aforeſaid, ſeems to be incloſed and incircled: This Poſition eſtabliſh'd, you may ſafely infer, that as by making way through the Air (the Statue not being cover'd with *Wax* or *Earth*) you guide your Piercer directly to wards the Point T, (which for Examples Sake we will ſuppoſe to be the *Relievo* of the Chin) by the ſame Reaſon, if the Statue were cover'd over with *Wax* or *Earth*, might you by boaring through the ſaid *Wax* or *Earth* attain the Point aim'd at, the *Wax* or *Earth* poſſeſſing but the ſame place which otherwiſe the Air would have done: From what hath been thus diſcours'd concerning theſe Things, it may be concluded, that the Effect we mention'd before concerning the making of one half of the Statue in the Iſle of *Pharos*, and finiſhing the other half in the Mountains of *Carrara*, is a thing not only not impoſſible but very eaſy to be perform'd; For let the ſaid Statue or Model of *Phidias* be divided into two Segments, and ſuppoſe, for Example, this Section of a plain Superfices be made in the Waſt or Girdling place, doubtleſs by the only aſſiſtance of our *Definitor* it will be eaſy to mark out in the Circle of the Inſtrument whatſoever Points ſhall be thought fit, belong to the divided Superfices: Theſe things granted to be feaſible, you ſhall not need to make any Queſtion of being able to find out at Pleaſure in the Model, any part whatſoever you ſhall deſire to find; and that only by Drawing a ſmall Red Line in the Model, which ſerves inſtead of an Interſection of the *Horizon*, in the place where this Segment ſhould Terminate, if the Statue were divided; and the Points ſo mark'd will direct you the way how the Work may be Finiſhed: And in like manner may other Things be done, as hath been ſaid before. Finally, by the whole Diſcourſe here made concerning all theſe particulars, it is ſufficiently Evident, that all Meaſures, Proportions and Limitations are to be taken, whether in the Life, or Copie, by a moſt certain and infallible Rule for the bringing of any Work to Perfection in this Art; and we could wiſh that this way of proceeding were more ſeriouſly intended by all our *Painters* and *Sculptors*, ſince, if it were, they would ſoon come to find the extraordinary Benefit of it: But becauſe all Things are moſt illuſtrated by Example, and that the Pains we have already taken in this Matter may Conduce to the greater Advantage; we have thought fit to beſtow yet a little farther Labour in Diſcribing the Meaſures of all the principal Parts in Man's Body and not only the parts of this or that particular Man, but as far as was poſſible, even the very Perfection of all Beautiful and Excellent Proportions; the ſeveral parts whereof having obſerv'd in ſeveral human Bodies, ſome excelling chiefly in this, ſome in that external Gift of Nature, we have thought Material to ſet down in Writing; following the Example of him, who being imploy'd by the *Crotoniati* to make the Statue of their *Goddeſs*, went about collecting from the moſt Beautiful Virgins (whom, among many, he with great Diligence ſearch'd out) thoſe Proportions and handſome Features wherein each of them principally excell'd, and apply'd them to his own Statue. Since much after the ſame manner we, having taken the Draught from thoſe Bodies, that of divers others were judg'd, by the moſt Sagacious in this Inquiry, to be the moſt exactly Built and Compos'd, with all their ſeveral Meaſures and Proportions; and comparing them exactly together, to obſerve wherein they excell'd, or were excell'd each by the other, have made choice out of this Variety of Models and Examples, of thoſe middle Proportions which ſeem'd to us moſt agreeable, and which we have here ſet down by the Lengths, Bigneſſes and Thickneſſes of all the Principal and moſt Noted Parts; and in the firſt place Lengths are theſe following.

The heights from the Ground.	*Feet.*	*Degrees.*	*Minutes.*
The greateſt height from the Ground to the Inſtep of the Foot.	0	3	0
The height up to the Ankle-bone on the outſide of the Leg.	0	2	2
The height up to the Ankle-bone on the inſide of the Leg.	0	3	1
The height up to the receſs which is under the Calf of the Leg.	0	8	5
The height up to the receſs which is under the *Relievo* of the Knee-bone within.	1	4	3
The height up to the Muſcle on the outſide of the Knee.	1	7	0
The height up to the Buttocks and Teſticles.	2	6	9
The height up to the *Os Sacrum.*	3	0	0
The height up to the Joynt of the Hips.	3	1	1
The height up to the Navel.	3	6	0
The height up to the Waſt.	3	7	9
The height up to the Teats and Blade-bone of the Stomach.	4	3	5
The height up to that part of the Throat where the Weezle-pipe beginneth.	5	0	0
The height up to the knot of the Neck where the Head is ſet on.	5	1	0
The height up to the Chin	5	2	0
The height up to the Ear.	5	5	0
The height up to the Roots of the Hairs of the Forehead.	5	9	0
The height up to the middle Finger of a Hand that hangs down.	2	3	0
The height up to the Joynt of the Wriſt of the ſaid Hand.	3	0	0
The height up to the Joynt of the Elbow of the ſaid Hand.	3	8	5
The height up to the higheſt Angle of the Shoulder.	5	1	8

The Amplitude or Largeneſſes of the Parts are meaſur'd from the Right Hand to the Left.

The greateſt breadth of the Foot.	0	4	2
The greateſt breadth of the Heel.	0	2	3
The breadth of the fulleſt Part beneath the Jettings out of the Ankle-Bones.	0	2	4
The Receſs or falling-in above the Ankles.	0	1	5
The Receſs of the mid-leg under the Muſcle or Calf.	0	2	5
The greateſt thickneſs of the Calf.	0	3	5
The falling-in under the *Relievo* of the Knee-bone.	0	3	5
The greateſt breadth of the Knee-Bone.	0	4	0
The falling-in of the Thigh above the Knee.	0	3	5
The breadth of the middle or biggeſt Part of the Thigh.	0	5	5
The greateſt breadth among the Muſcles of the Joynt of the Thigh.	1	1	1
The greateſt breadth between the two Flanks above the Joynts of the Thigh.	0	0	0

	Feet.	*Degrees.*	*Minutes.*
The breadth of the largeſt part of the Breaſt beneath the Armpits.	1	1	5
The breadth of the largeſt Part between the Shoulders.	1	5	0
The breadth of the Neck.	0	0	0
The breadth between the Cheeks.	0	4	8
The breadth of the Palm of the Hand	0	0	0
The breadth and thickneſs of the Arms, differ according to the ſeveral Motions thereof, but the moſt common are theſe following.			
The breadth of the Arm at the Wriſt.	0	2	3
The breadth of the brawny part of the Arm under the Elbow	0	3	2
The breadth of the brawny part of the Arm above, between the Elbow and the Shoulder.	0	4	0
The thickneſs from the Fore-parts to then Hinder-parts.			
The length from the great Toe to the Heel.	1	0	0
The thickneſs from the Inſtep to the Angle or corner of the Heel.	0	4	3
The falling-in of the Inſtep.	0	3	0
From the falling-in under the Calf to the middle of the Shin.	0	3	6
The outſide of the Calf of the Leg.	0	4	0
The outſide of the Pan of the Knee.	0	4	0
The thickneſs of the biggeſt part of the Thigh.	0	6	0
From the Genitalls to the higheſt riſing of the Buttocks.	0	7	5
From the Navel to the Reins,	0	7	0
The thickneſs of the Waſt.	0	6	6
From the Teats to the higheſt Riſing of the Reins of the Back.	0	7	5
From the Weezlepipe to the knot or joynture of the Neck.	0	4	0
From the Forehead to the hinder Part of the Head.	0	6	4
From the Forehead to the hole of the Ear.	0	0	0
The thickneſs of the Arm at the Wriſt of the Hand.	0	0	0
The thickneſs of the brawn of the Arm under the Elbow.	0	0	0
The thickneſs of the brawn of the Arm between the Elbow and the Shoulder.	0	0	0
The greateſt thickneſs of the Hand.	0	0	0
The thickneſs of the Shoulders.	0	3	4

By means of theſe meaſures it may eaſily be computed what Proportions all the Parts and Members of the Body have one by one to the whole length of the Body; and what Agreement and Symmetrie they have among themſelves, as alſo how they vary or differ one from another; which things we certainly conclude moſt profitable and fit to be known: Nor were it from the Purpoſe to particularize how the Parts vary and altar, according to the ſeveral Geſtures incident to humane Bodies, as, whether they be Sitting, or Inclining to this, or that ſide: But we ſhall leave the more curious diſquiſition into theſe things, to the Diligence and Induſtry of our *Artiſt*. It would alſo be of very much conducement, to be well inform'd of the number of the Bones, the Muſcles, and riſings of the Nerves; and eſpecially to know how, by certain Rules, to take the Circumferences of particular Diviſions of Bodies, ſeparately conſider'd from the reſt, by an inſpection into thoſe Parts which are not outwardly expos'd to ſight: In like manner as if a Cylinder ſhould be cut down right through the middle, ſo as out of that part of the Cylinder which is viſible throughout, there ſhould be ſeparated, by a Circular Section through the whole length of the Figure, an inward conſimilar part which was before unſeen, ſo as to make of the ſame Cylinder two Bodies, whoſe Baſes ſhould be alike, and of the ſame Form, as being indeed wholly compriz'd within the ſame Lines and Circles throughout: By the Obſervation of which ſort of Section is to be underſtood the manner of ſeparation of the parts and Bodies before intimated; for as much as the Deſign of the Line by which the Figure is terminated, and by which the viſible Superficies is to be ſeparated from that which lies hid from the ſight, is to be drawn juſt in the ſame manner; and this Deſign being delineated on a Wall, would repreſent ſuch a Figure as would be much like a Shadow projected thereupon from ſome interpoſing Light, and which ſhould Illuminate it from the ſame Point of the *Ayr*, where at firſt the Beholder's Eye was plac'd: But this kind of Diviſion or Separation, and the way of deſigning things after this manner, belongs more properly to the *Painter* than the *Sculptor*, and in that Capacity we ſhall treat of them more largely elſewhere. Moreover, it is of main Concernment to whatſoever Perſon would be eminent in this Art, to know how far each *Relievo* or Receſs of any Member whatſoever is diſtant from ſome determin'd Poſition of Lines.

FINIS.

18.10.12.

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